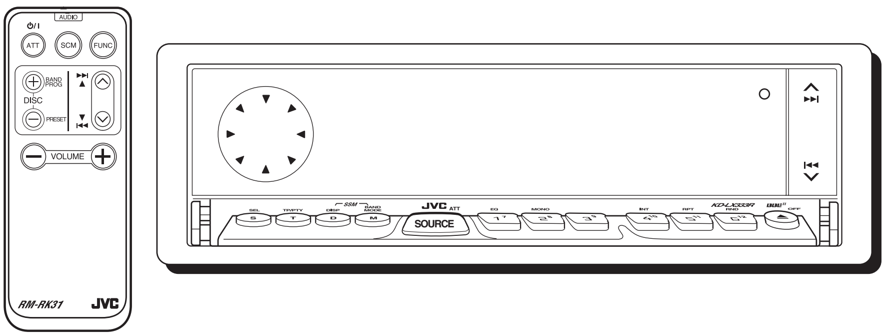
JVC

SERVICE MANUAL

CD RECEIVER

KD-LX333R



COMPACT DISC DIGITAL AUDIO TEXT

R·D·S

BBE II

Area Suffix	
E -----	Continental Europe
EX -------	Central Europe

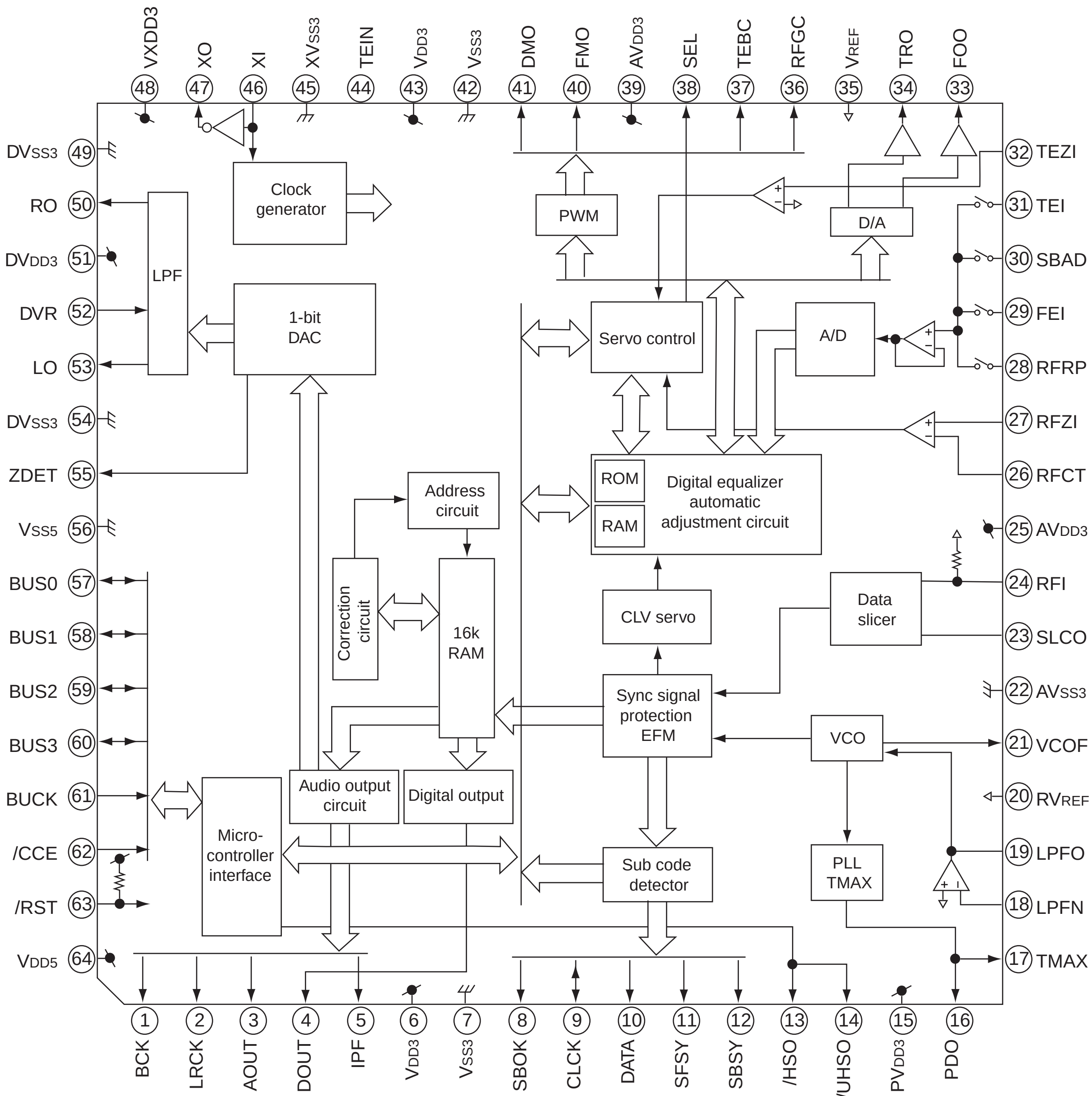
Contents

No.49715
Jun. 2002

Description of major ICs

■ TC9490FA (IC521) : DSP & DAC

1.Pin layout & Block daiagram



2.Pin function (1/2)

TC9490FA(2/3)

Pin No.	Symbol	I/O	Function
1	BCK	O	Bit clock outputpin 32fs, 48fs, or 64fs selectable by command.
2	LRCK	O	L/R channel clock output pin."L" for L channe and "H" for R channel. Output polarity can be inverted by command.
3	AOUT	O	Audio data output pin. MSB-first or LSB-first selectable by command.
4	DOUT	O	Digital data output pin. Outputs up to double-speed playback.
5	IPF	O	Correction flag output pin.When set to "H",AOUT output cannot be corrected by C2 correction processing.
6	VDD3	-	Digital 3.3V power supply voltage pin.
7	VSS3	-	Digital GND pin.
8	SBOK	O	Subcode Q data CRCC result output pin."H" level when result is OK.
9	CLCK	I/O	Subcode P-W data read clockI/O pin. I/O polarity selectable by command.
10	DATA	O	Subcode P-W data output pin.
11	SFSY	O	Playback frame sync signal output pin.
12	SBSY	O	Subcode block sync signal output pin. "H" level at S1 when subcode sync is detected.
13	/HSO	O	Playback speed mode flag output pins.
14	/UHSO	O	

/UHSO	/HSO	Playback speed
H	H	Normal
H	L	Double
L	L	4 times
--	--	---

Pin No.	Symbol	I/O	Function
15	PVDD3	-	PLL-only 3.3V power supply voltage pin.
16	PDO	O	EFM and PLCK phase difference signal output pin.
17	TMAX	O	TMAX detection result output pin.

TMAX Detection result	TMAX Output
Longer than fixed period	"PVDD3"
Within fixed period	"HIZ"
Shorter than fixed period	"AVSS3"

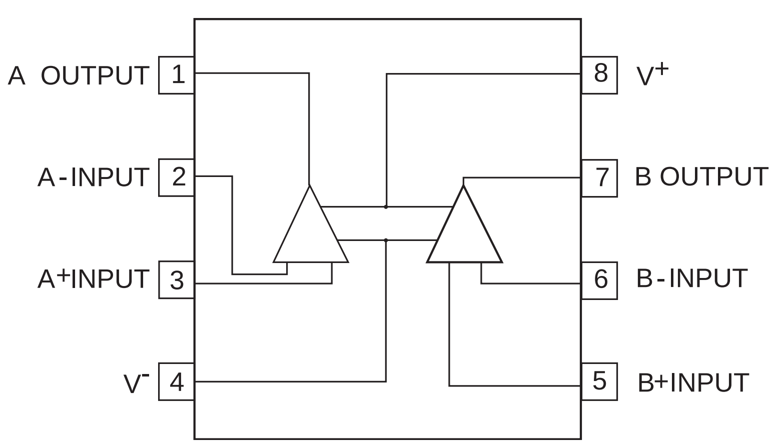
Pin No.	Symbol	I/O	Function
18	LPFN	I	Inverted input pin for PLL LPF amp.
19	LPFO	O	Output oin for PLL LPF amp.
20	PVREF	-	PLL-only VREF pin.
21	VCOF	O	VCO filter pin.
22	AVSS3	-	Analog GND pin.
23	SLCO	O	DAC output pin for data slice level generation.
24	RFI	I	RF signal input pin.Zin selectable by command.
25	AV	-	Analog 3.3V power supply voltage pin.
26	RFCT	I	RFRP signal center level input pin.
27	RFZI	I	RFRP signal zero-cross input pin.
28	RFRP	I	RF ripple signal input pin.
29	FEI	I	Focus error signal input pin.
30	SBAD	I	Sub-beam adder signal input pin.
31	TEI	I	Tracking error input pin. Inputs when tracking servo is on.
32	TEZI	I	Tracking error signal zero-cross input pin.
33	FOO	O	Focus equalizer output pin.
34	TRO	O	Tracking equalizer output pin.
35	VREF	-	Analog reference power supply voltage pin.

2.Pin function (2/2)

TC9490FA(3/3)

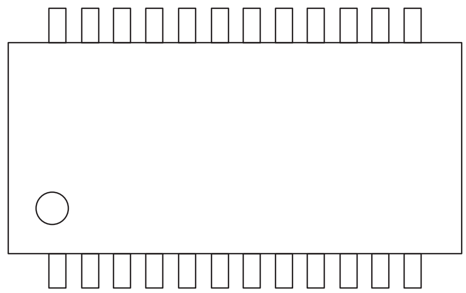
Pin No.	Symbol	I/O	Function
36	RFGC	O	RF amplitude adjustment control signal output pin.
37	TEBC	O	Tracking balance control signal output pin.
38	SEL	O	APC circuit ON/OFF signal output pin. At laser on,high impedance with UHS="L" ,H output with UHS="H".
39	AVDD3	-	Analog 3.3V power supply voltage pin.
40	FMO	O	Feed equalizer output pin.
41	DMO	O	Disc equalizer output pin.
42	VSS3	-	Digital GND pin.
43	VDD3	-	Digital 3.3V power supply voltage pin.
44	TESIN	I	Test input pin. Normally,fixed to "L".
45	XVSS3	-	System clock oscillator GND pin.
46	XI	I	System clock oscilatoe input pin.
47	XO	O	System clock oscillator output pin.
48	XVDD3	-	System clock oscillator 3.3V power supply voltage pin.
49	DVSS3	-	DA converter GND pin.
50	RO	O	R-channel data forward output pin.
51	DVDD3	-	DA converter 3.3V power supply pin.
52	DVR	-	Reference voltage pin.
53	LO	O	L-channel data forward output pin.
54	DVSS3	-	DA converter GND pin.
55	ZDET	O	1 bit DA converter zero data detection flag output pin.
56	VSS5	-	Microcontroller interface GND pin.
57 58 59 60	BUS0 BUS1 BUS2 BUS3	I/O	Microcontroller interface data I/O pins.
61	BUCK	I	Microcontroller interface clock input pin.
62	/CCE	I	Microcontroller interface chip enable signal input pin.At "L". Bus0 to BUS3 are active.
63	/RST	I	Reset signal input pin. At reset,"L".
64	VDD5	-	Microcontroller interface 5V power supply pin.

■ NJM4565MD (IC151,IC171,IC323) : Operational amp

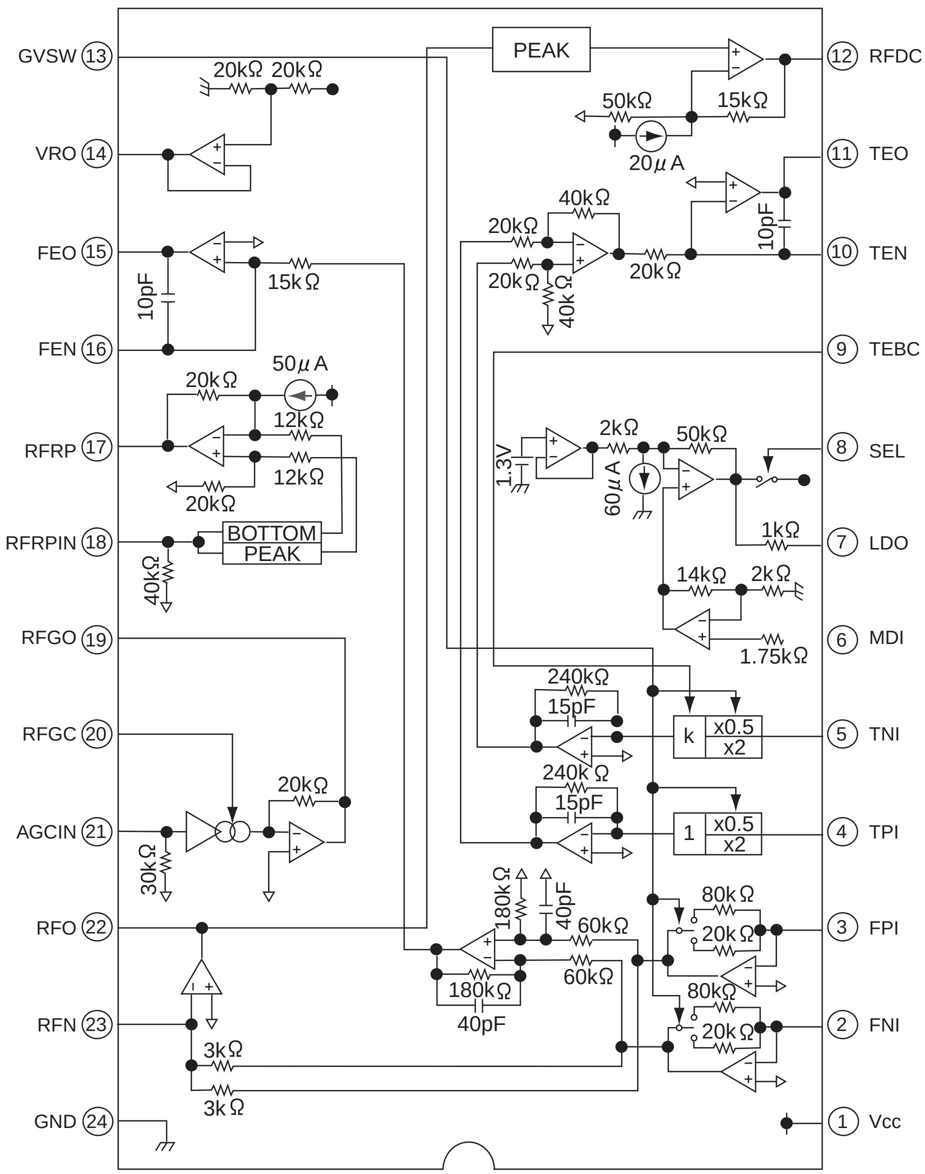


■ TA2147F-X (IC501) : RF amp.

1.Terminal layout



2.Block diagram

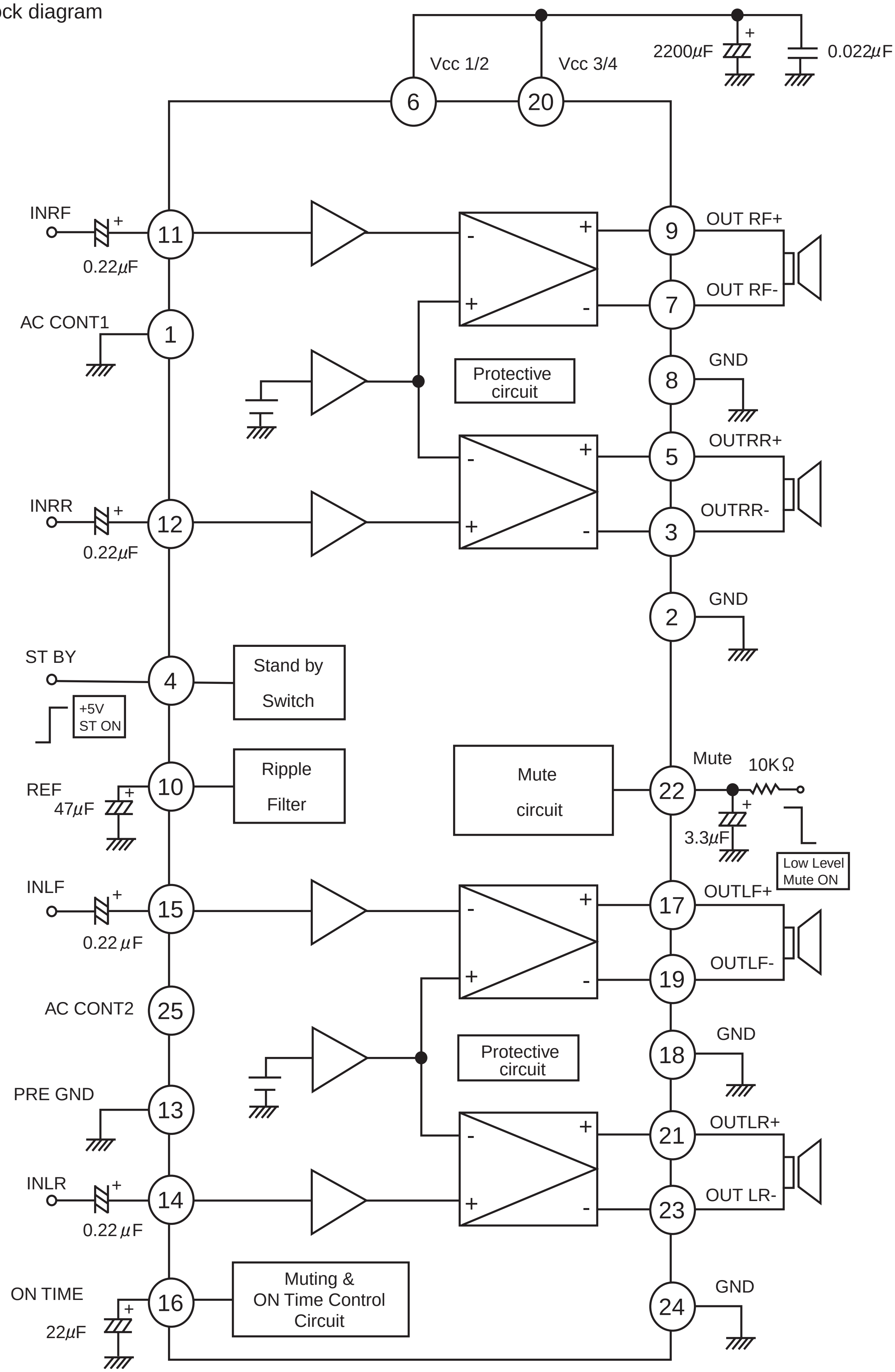


3.Pin function

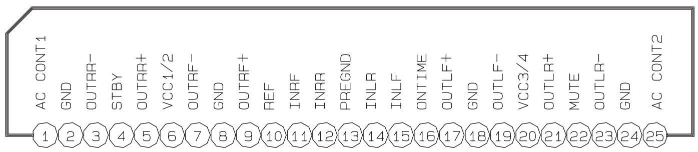
<table>
<tr><th>Pin No.</th><th>Symbol</th><th>I/O</th><th>Function</th></tr>
<tr><td>1</td><td>Vcc</td><td>-</td><td>3.3V Power supply pin</td></tr>
<tr><td>2</td><td>FNI</td><td>I</td><td>Main-beam amp input pin</td></tr>
<tr><td>3</td><td>FPI</td><td>I</td><td>Main-beam amp input pin</td></tr>
<tr><td>4</td><td>TPI</td><td>I</td><td>Sub-beam amp input pin</td></tr>
<tr><td>5</td><td>TNI</td><td>I</td><td>Sub-beam input pin</td></tr>
<tr><td>6</td><td>MDI</td><td>I</td><td>Monitor photo diode amp input pin</td></tr>
<tr><td>7</td><td>LDO</td><td>O</td><td>Laser diode amp output pin</td></tr>
<tr><td>8</td><td>SEL</td><td>I</td><td>APC circuit ON/OFF control signal,laser diode (LDO) control signal input or bottom/peak detection frequency change pin.
<table>
<tr><th>SEL</th><th>APC circuit</th><th>LDO</th></tr>
<tr><td>GND</td><td>OFF</td><td>Connected to Vcc through 1kΩresistor</td></tr>
<tr><td>HIZ</td><td>ON</td><td>Control signal output</td></tr>
<tr><td>Vcc</td><td>ON</td><td>Control signal output</td></tr>
</table></td></tr>
<tr><td>9</td><td>TEBC</td><td>I</td><td>Tracking error balance adjustment signal pin
Adjusts TE signal balance by eliminating carrier component from PWM signal(3-state output, PWM carrier = 88.2kHz) output from TC9490F/FA TEBC pin using RC-LPF and inputting DC.
TEBC input voltage:GND~Vcc</td></tr>
<tr><td>10</td><td>TEN</td><td>I</td><td>Tracking error signal generation amp negative-phase input pin</td></tr>
<tr><td>11</td><td>TEO</td><td>O</td><td>Tracking error signal generation amp output pin.
Combining TEO signal and RFRP signal with TC9490F/FA configures tracking search system.</td></tr>
<tr><td>12</td><td>RFDC</td><td>O</td><td>RF signal peak detection output pin</td></tr>
<tr><td>13</td><td>GVSW</td><td>I</td><td>AGC/FE/TE amp gain change pin
<table>
<tr><th>GVSW</th><th>Mode</th></tr>
<tr><td>GND</td><td>CD-RW</td></tr>
<tr><td>HIZ</td><td>CD-DA</td></tr>
<tr><td>Vcc</td><td>CD-DA</td></tr>
</table></td></tr>
<tr><td>14</td><td>VRO</td><td>O</td><td>Reference voltage (VRO) output pin *VRO = 1/2 Vcc when Vcc = 3.3V</td></tr>
<tr><td>15</td><td>FEO</td><td>O</td><td>Focus error signal generation amp output pin</td></tr>
<tr><td>16</td><td>FEN</td><td>I</td><td>Focus error signal generation amp negative-phase input pin</td></tr>
<tr><td>17</td><td>RFRP</td><td>O</td><td>Signal amp output pin for track count
Combining RFRP signal TEO signal with TC9490F/FA configures tracking search system.</td></tr>
<tr><td>18</td><td>RFRPIN</td><td>I</td><td>Signal generation amp input pin for track count</td></tr>
<tr><td>19</td><td>RFGO</td><td>O</td><td>RF signal amplitude adjustment amp output pin</td></tr>
<tr><td>20</td><td>RFGC</td><td>I</td><td>RF amplitude adjustment control signal input pin
Adjusts RF signal amplitude by eliminating carrier component from PWM signal (3-state output, PWM carrier = 88.2kHz) output from TC9490F/FA RFGC pin using RC-LPF and inputting DC.
*RFGC input voltage : GND-Vcc</td></tr>
<tr><td>21</td><td>AGCIN</td><td>I</td><td>RF signal amplitude adjustment amp input pin</td></tr>
<tr><td>22</td><td>RFO</td><td>O</td><td>RF signal generation amp output pin</td></tr>
<tr><td>23</td><td>RFN</td><td>I</td><td>RF signal generation amp input pin</td></tr>
<tr><td>24</td><td>GND</td><td>-</td><td>GND pin</td></tr>
</table>

■ TA8273H (IC941) : Power amp

1.Block diagram



2.Terminal layout



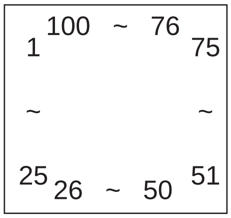
3.Pin function

TA8273H

Pin No.	Symbol	Function
1	AC CONT 1	Header of IC
2	GND	Power GND
3	OUTRR-	Outpur(-) for Rear Rch
4	STBY	Stand by input
5	OUTRR+	Output (+) for Rear Rch
6	VCC1/2	Power input
7	OUTRF-	Output (-) for Front Rch
8	GND	Power GND
9	OUTRF+	Output (+) for Front Rch
10	REF	Ripple filter
11	INRF	Front Rch input
12	INRR	Rear Rch input
13	PREGND	Signal GND
14	INLR	Rear Lch input
15	INLF	Front Lch input
16	ONTIME	Power on time control
17	OUTLF+	Output (+) for Front Lch
18	GND	Power GND
19	OUTLF-	Output (-) for Front Lch
20	VCC3/4	Power input
21	OUTLR+	Output (+) for Rear Lch
22	MUTE	Muting control input
23	OUTLR-	Output (-) for Rear Lch
24	GND	Power GND
25	AC CONT 2	Header of IC

■ UPD784217AGC168 (IC701) : Main micon

1.Pin layout



2.Pin functions(1/3)

Pin No.	Symbol	I/O	Function
1	SW2	I	CD mechanical switch 2 detection signal input
2	SW3	I	CD mechanical switch 3 detection signal input
3	SW4	I	CD mechanical switch 4 detection signal input
4	RST-SW	I	Rest switch detection signal input
5	LMO	O	Motor signal control signal output at loading
6	LM1	O	Motor signal control signal output at leject
7	DIM-OUT	O	DIMMER pulse control output
8	ILLUM1	O	POWER ON:H,FLAT PANEL:L
9	VDD	-	5V
10	X2	-	
11	X1	-	
12	VSS	-	GND
13	XT2	-	
14	XT1	-	
15	RESET	I	Reset detection teaminal
16	SW1	I	CD mechanical switch 1 detection signal input
17	BUS-INT	I	J-BUS int
18	PS2	I	POWER SAVE2. Operating together with BACKUP.H input:STOP
19	CRUISE	I	Pulse signal for CRUISE input(only in 330R)
20	RDS-SCK	I	RDS clock input
21	RDS DA	I	RDS data input
22	REMOCON	I	Remocon input(111R:READY)
23	AVDD	-	5V
24	AVREFO	-	5V
25	TEM1	I	Temperature detection input
26	KEY0	I	Key input 0
27	KEY1	I	Key input 1
28	KEY2	I	Key input 2
29	LEVEL	I	Level meter input
30	MRC	I	MRC output voltage detection
31	SQ	I	S.QUALITY level input
32	SM	I	S.METER level input
33	AVSS	-	GND
34	W-VOL	O	Subwoofer volume control analog output
35	DOT-CNT	O	Dot matrix contrast adjustment analog output
36	AVREF	-	5V
37	BUS-SI	I	J-BUS data input
38	BUS-SO	O	J-BUS data output
39	BUS-SCK	I/O	J-BUS clock input and output
40	STAGE2	I	H:LX333R L:LX111R
41	LCD-DA	O	Data output to LCD driver
42	LCD-SCK	O	Clock output to LCD driver

2.Pin functions(2/3)

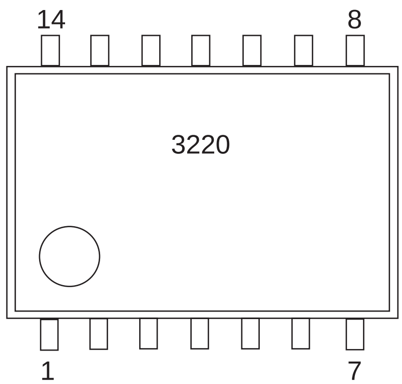
Pin No.	Symbol	I/O	Function
43	LCD-CE1	O	Chip enable output 1 to LCD driver
44	BUZZER	O	Buzzer output
45	12C-DAI	I	12C communication data input
46	12C-DAO	O	12C communication data output
47	12C-CLK	O	12C communication clock output
48	BUS-I/O	O	J-BUSI/O signal terminal
49	TMO	O	Tray motor negative signal output terminal
50	TM1	O	Tray motor positive signal output terminal
51	DMO	O	Motor control signal output in door down
52	DM1	O	Motor control signal output in door up
53	ST	I	Stereo signal input L:Stereo
54	NC	O	
55	AFCK	O	AF check output AF check:L
56	C-SW1	I	Chameleon machanical switch 1 detection signal input
57	C-SW2	I	Chameleon machanical switch 2 detection signal input
58	C-SW3	I	Chameleon machanical switch 3 detection signal input
59	C-SW4	I	Chameleon machanical switch 4 detection signal input
60	C-SW5	I	Chameleon machanical switch 5 detection signal input
61	VOL1	I	Rotary volume signal 1 input
62	VOL2	I	Rotary volume signal 2 input
63	SEEK/STP	O	Auto seek/stop selection output SEEK:L STOP:H
64	NC	O	
65	FM/AM	-	FM/AM selection output FM:H AM:L
66	PLL-CE	O	IC control CE output
67	PLL-DO	O	IC control data output
68	PLL-CLK	O	IC control clock output
69	PLL-DI	I	IC control data input
70	TEL-MUTE	I	Telephone mute detection input
71	AMP-KILL	O	POWER AMP ON/OFF selection output
72	VSS	-	GND
73	DIM -IN	I	Dimmer detection input L:dimmer ON
74	PS1	I	Power save 1 Operating together with ACC.Power save :L Operating :H
75	POWER	O	Power ON/OFF selection output Power ON:H
76	CD-ON	O	CD power supply control signal output CD:H
77	MUTE	O	Mute output MUTEON:L
78	W-LPF1	O	Subwoofer cut off frequency control output 1
79	W-LPF2	O	Subwoofer cut off frequency control output 2
80	W-MUTE	O	Subwoofer mute output MUTE ON:H
81	VDD	-	5V
82	VOL-DA	O	data output terminal
83	VOL-CLK	O	clock signal output terminal
84	CF-SEL	O	FM band filter selection signal output
85	GVSW	O	CD-DA/CD-RW selection control output CD-RW:L
86	LCD RST	O	Reset signal output to LCD driver
87	NC	-	
88	DMK	O	Door motor kick signal output
89	TMK	O	Tray motor kick signal output
90	NC	-	
91	BUCK	O	Data cmmunication clock output with CDLSI
92	CCE	O	Data cmmunication clock CE with CDLSI
93	RST	O	CDLSI reset signal output
94	TEST	-	GND

2.Pin functions(3/3)

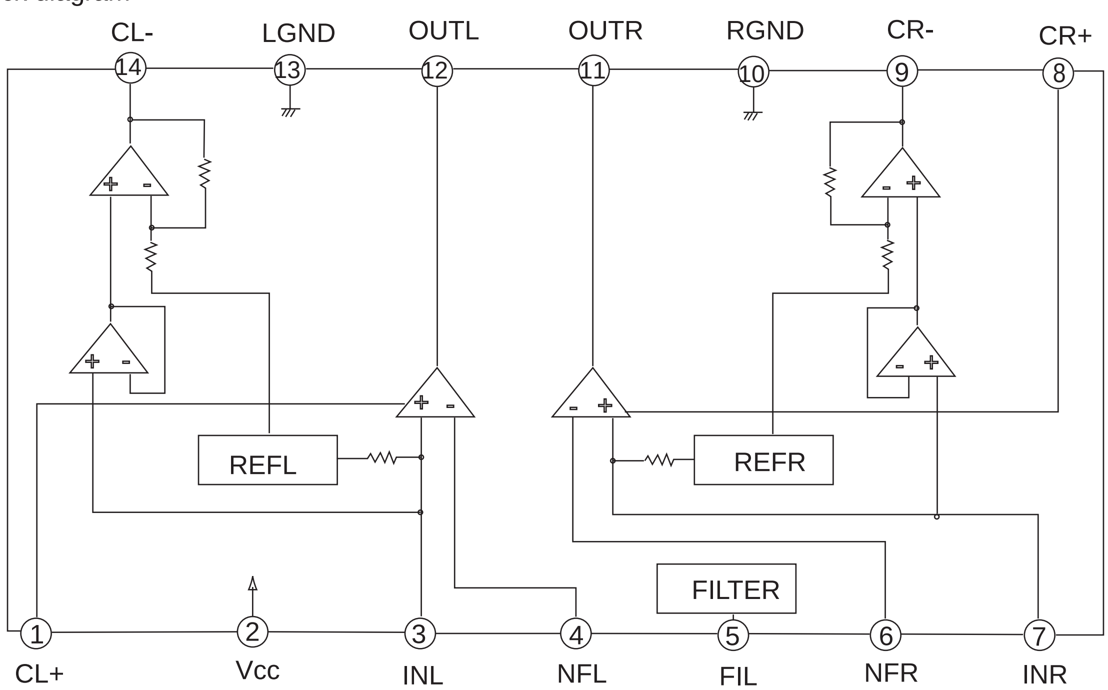
Pin No.	Symbol	I/O	Function
95	BUSO	I/O	Data communication input and output port 0 with CDLSI
96	BUS1	I/O	Data communication input and output port 1 with CDLSI
97	BUS2	I/O	Data communication input and output port 2 with CDLSI
98	BUS3	I/O	Data communication input and output port 3 with CDLSI
99	DISCSEL	I	H:not for 8cm DISC L:for 8cm DISC
100	NC	O	

■ BA3220FV-X (IC301,IC401) : Line out amp

1.Pin layout

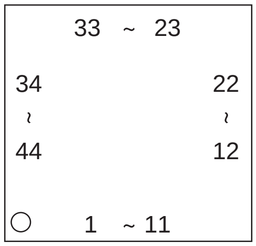


2.Block diagram

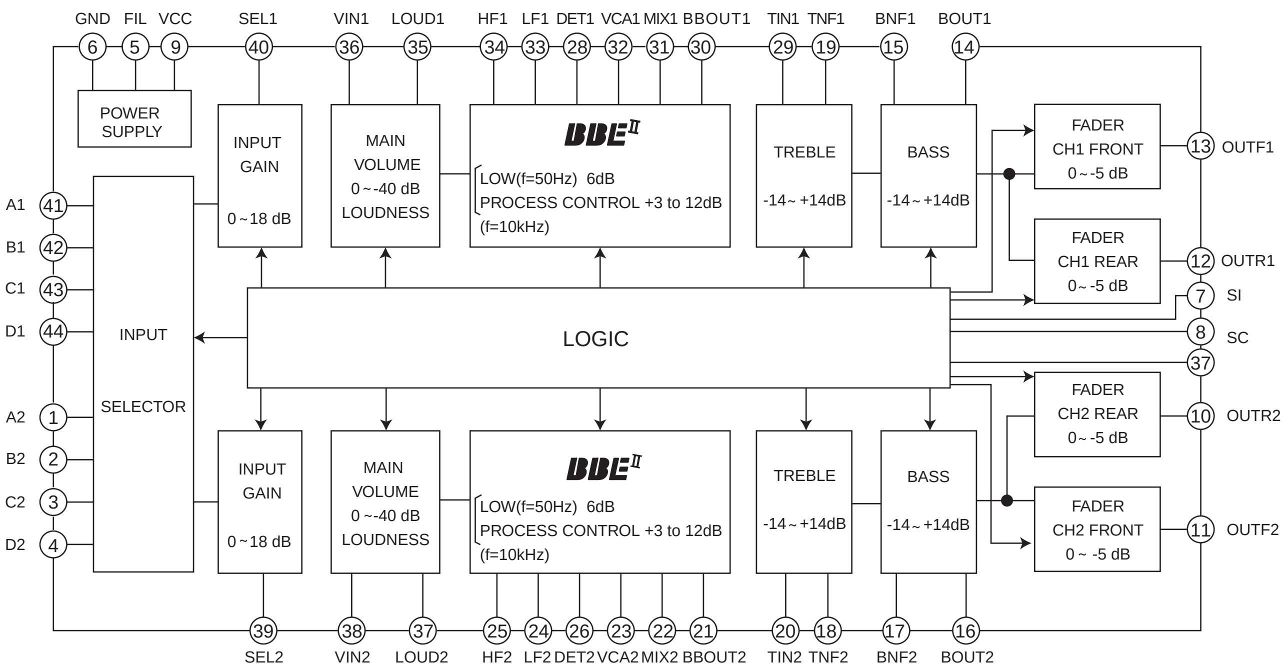


■ BD3860K (IC911) : E.Vol & Loud

1.Terminal layout



2.Block diagram

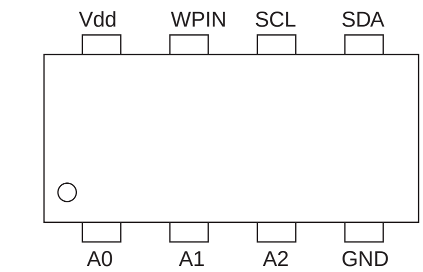


3.Pin function

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	A2	CH2 Input Pin A	23	VCA2	CH2 High Pass VCA Output Pin
2	B2	CH2 Input Pin B	24	LF2	CH2 Low Pass Filter Setting Pin
3	C2	CH2 Input Pin C	25	HF2	CH2 High Pass Filter Setting Pin
4	D2	CH2 Input Pin D	26	DET2	CH2 High Pass Attack/Release Time Setting Pin
5	FIL	1/2 VCC Pin	27	DEF	BBE Ⅱ ON/OFF switching time constant pin
6	GND	Ground Pin	28	DET1	CH1 High Pass Attack/Release Time Setting Pin
7	SI	Serial Data Receiving Pin	29	TIN1	CH1 treble Input Pin
8	SC	Serial Clock Receiving Pin	30	BBOUT1	CH1 BBE II Signal Output Pin
9	VCC	Power Supply Pin	31	MIX1	CH1 Output MIX Amplifier Inverse Input Pin
10	OUTR2	CH2 Rear Output Pin	32	VCA1	CH1 High Pass VCA Output Pin
11	OUTF2	CH2 Front Output Pin	33	LF1	CH1 Low Pass Filter Setting Pin
12	OUTR1	CH1 Rear Output Pin	34	HF1	CH1 High Pass Filter Setting Pin
13	OUTF1	CH1 Front Output Pin	35	LOUD1	CH1 Loudness Filter Setting Pin
14	BOUT1	CH1 Bass Filter Setting Pin	36	VIN1	CH1 Main Volume Input Pin
15	BNF1	CH1 Bass Filter Setting Pin	37	LOUD2	CH2 Loudness Filter setting Pin
16	BOUT2	CH2 Bass Filter Setting Pin	38	VIN2	CH2 Main Volume Input Pin
17	BNF2	CH2 Bass Filter Setting Pin	39	SEL2	CH2 Input Gain Output Pin
18	TNF2	CH2 Treble Filter Setting Pin	40	SEL1	CH1 Input Gain output Pin
19	TNF1	CH1 Treble Filter Setting Pin	41	A1	CH1 Input Pin A
20	TIN2	CH2 Treble Input Pin	42	B1	CH1 Input Pin B
21	BBOUT2	CH2 BBE II Signal Output Pin	43	C1	CH1 Input Pin C
22	MIX2	CH2 Output MIX Amplifier Inverse Input Pin	44	D1	CH1 Input Pin D

■ BR24C32F-X (IC703) : EEPROM

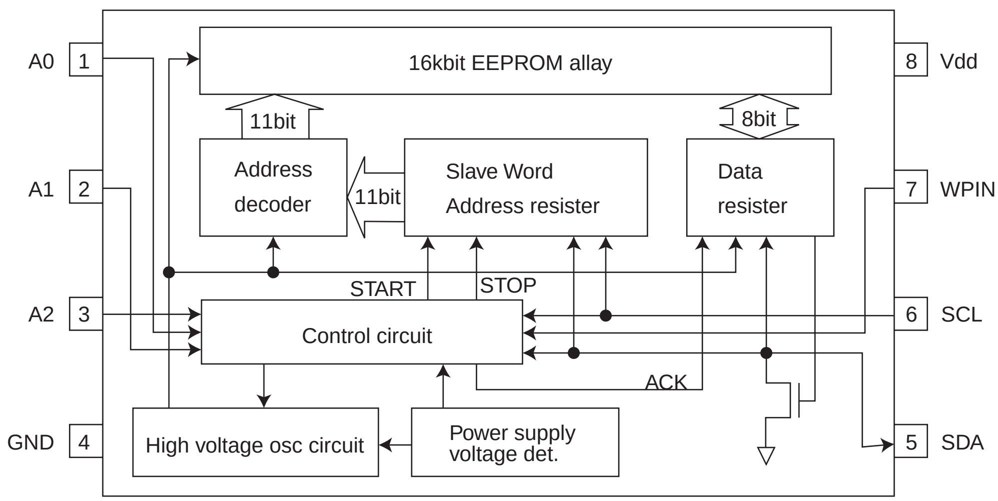
1. Pin layout



2. Pin function

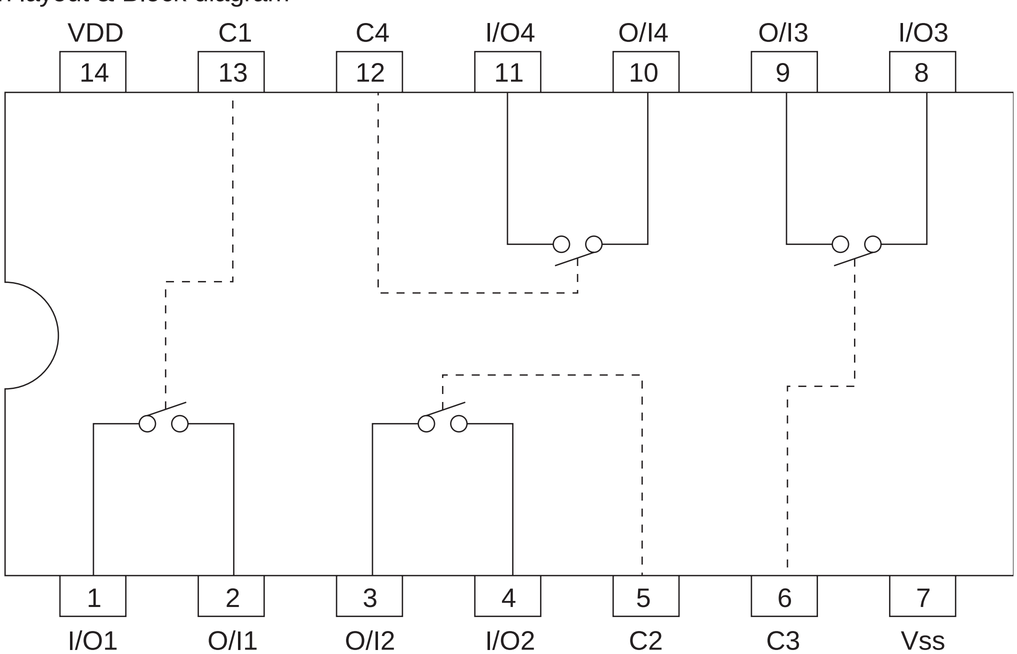
Symbol	I/O	Function
Vdd	-	Power supply.
GND	-	GND
A0,A1,A2	I	No use connect to GND.
SCL	I	Serial clock input.
SDA	I/O	Serial data I/O of slave and word address.
WPIN	I	Write protect terminal.

3. Block diagram



■ BU4066BCFV-X (IC322) : Quad analog switch

1. Pin layout & Block diagram

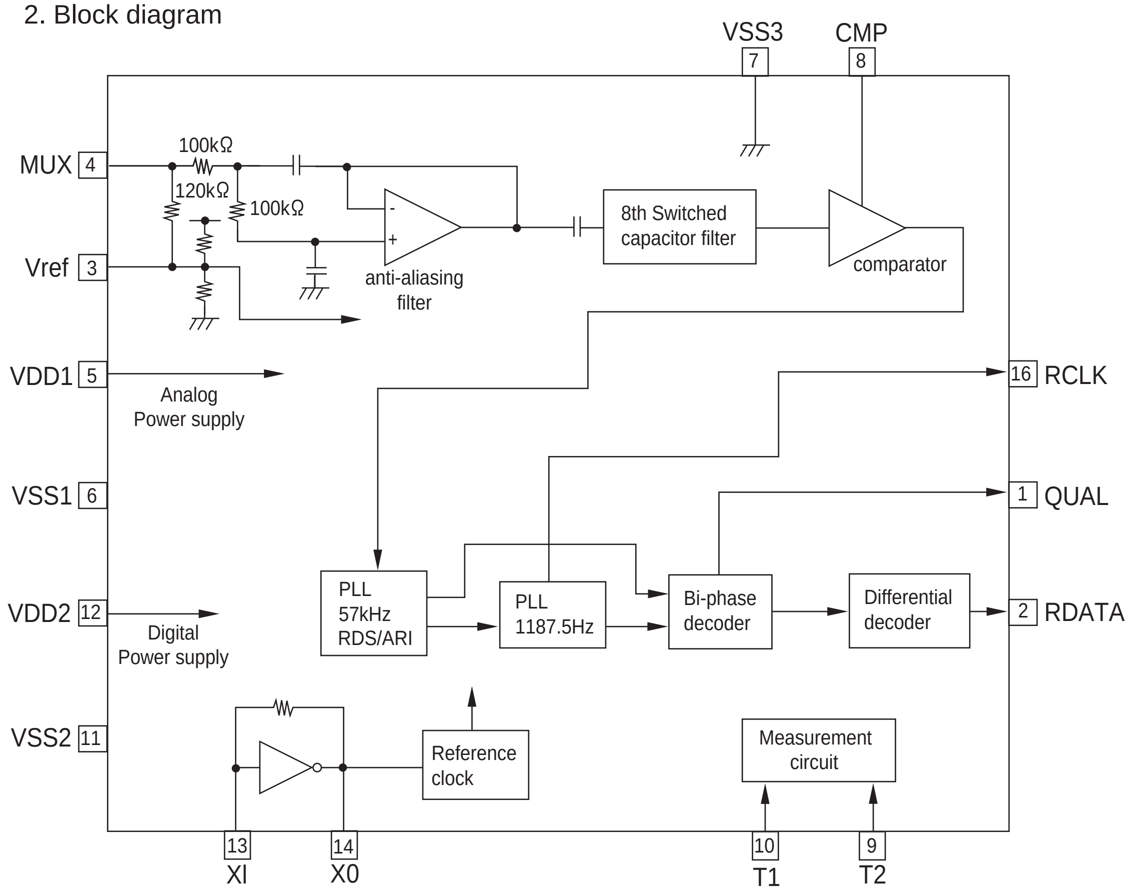


■ BU1923F (IC51) : RDS decoder

1. Pin layout

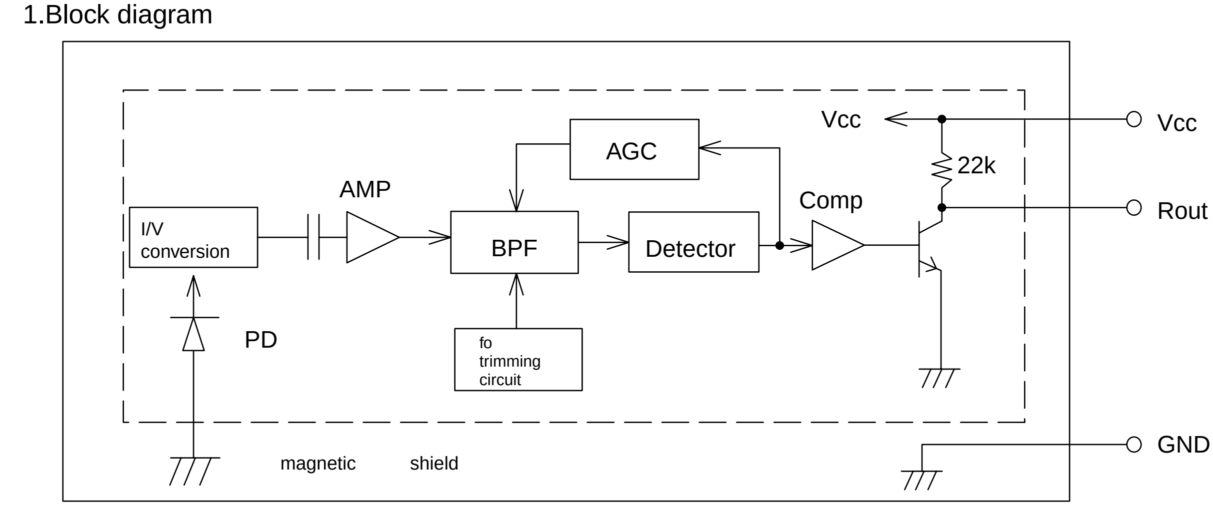
Pin name	Pin	Pin	Pin name
QUAL	1	16	RCLK
RDATA	2	15	N.C.
Vref	3	14	XO
MUX	4	13	XI
VDD1	5	12	VDD2
VSS1	6	11	VSS2
VSS3	7	10	T1
CMP	8	9	T2

2. Block diagram



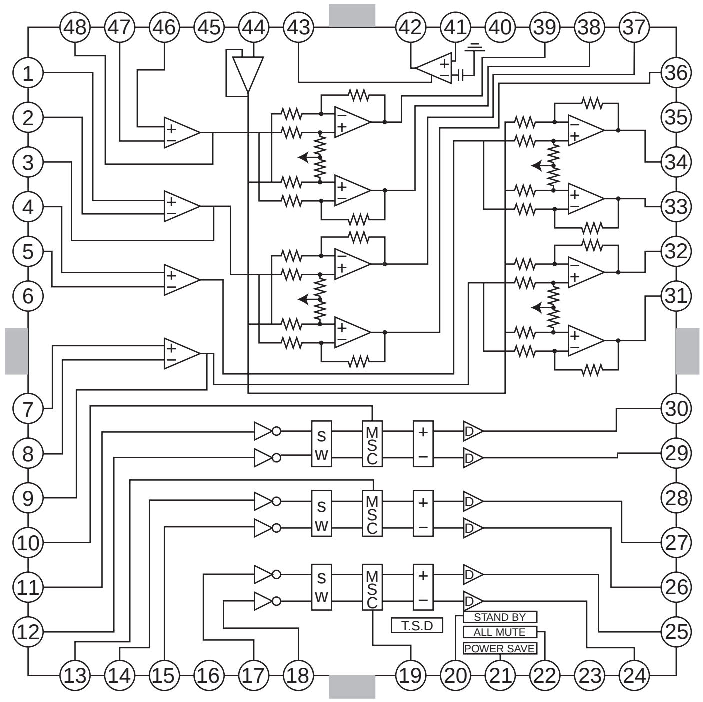
■ RPM6938-SV4 (IC602) : Remote sensor

1.Block diagram



■ FAN8037 (IC581) : CD driver

1. Pin layout & Block diagram

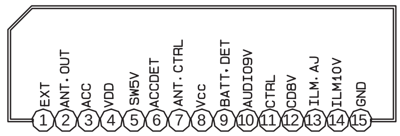


2. Pin function

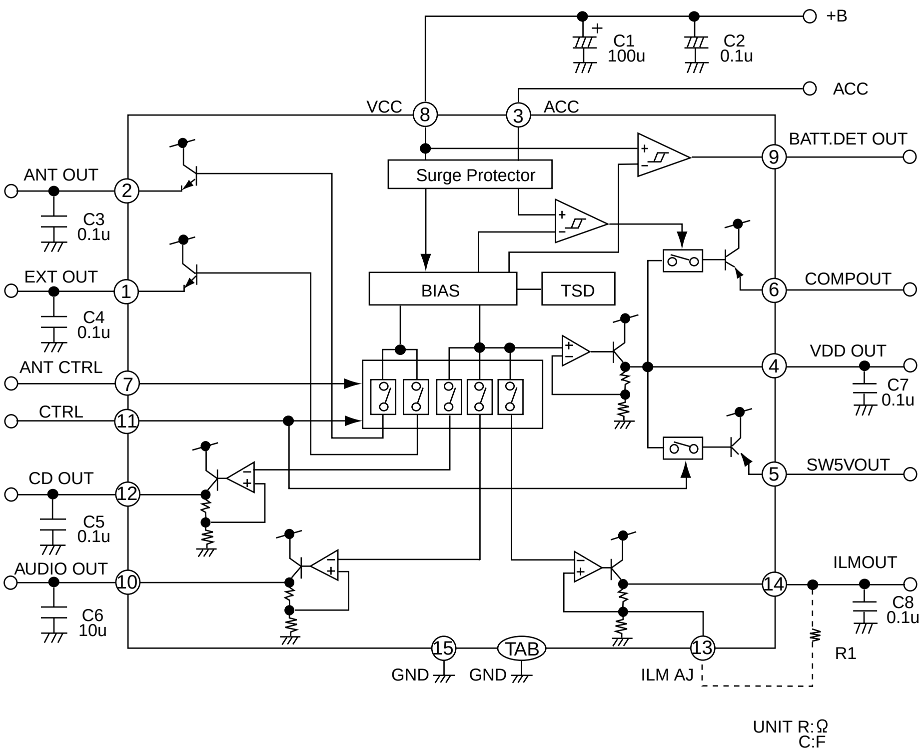
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	IN2+	I	CH2 op-amp input(+)	25	DO7+	O	CH7 drive output(+)
2	IN2-	I	CH2 op-amp input(-)	26	DO6-	O	CH6 drive output(-)
3	OUT2	O	CH2 op-amp output	27	DO6+	O	CH6 drive output(+)
4	IN3+	I	CH3 op-amp input(+)	28	PGND2	-	Power ground2
5	IN3-	I	Ch3 op-amp input(-)	29	DO5-	O	CH5 drive output(-)
6	OUT3	O	CH3 op-amp output	30	DO5+	O	CH5 drive output(+)
7	IN4+	I	CH4 op-amp input(+)	31	DO4-	O	CH4 drive output(-)
8	IN4-	I	CH4 op-amp input(-)	32	DO4+	O	CH4 drive output(+)
9	OUT4	O	CH4 op-amp output(+)	33	DO3-	O	CH3 drive output(-)
10	CTL1	I	CH5 motor speed control	34	DO3+	O	CH3 drive output(+)
11	FWD1	I	CH5 forward input	35	PGND1	-	Power ground1
12	REV1	I	CH5 reverse input	36	DO2-	O	CH2 drive output(-)
13	CTL2	I	CH6 motor speed control	37	DO2+	O	CH2 drive output(+)
14	FWD2	I	CH6 forward input	38	DO1-	O	CH1 drive output(-)
15	REV2	I	CH6 reverse input	39	DO1+	O	CH1 drive output(+)
16	SGND	-	Signal ground	40	PVCC1	-	Power supply voltage
17	FWD3	I	CH7 forward input	41	REGOX	I	Regulator feedback input
18	REV3	I	CH7 reverse input	42	REGX	O	Regulator output
19	CTL3	I	CH7 motor speed control	43	RESX	I	Regulator reset input
20	SB	I	Stand by	44	VREF	I	Bias voltage input
21	PS	I	Power save	45	SVCC	-	Signal supply voltage
22	MUTE	I	All mute	46	IN1+	I	CH1 op-amp input(+)
23	PVCC2	-	Power supply voltage	47	IN1-	I	CH1 op-amp input(-)
24	DO7-	O	CH7 drive output(-)	48	OUT1	O	CH1 op-amp output

■ HA13164A (IC961) : Regulator

1.Terminal layout



2.Block diagram

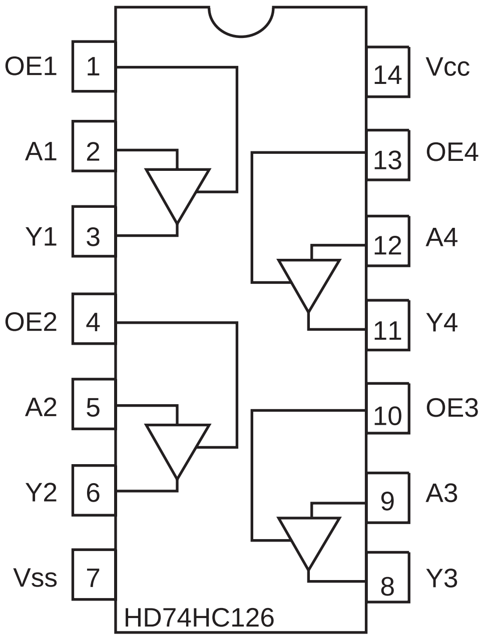


note1) TAB (header of IC) connected to GND

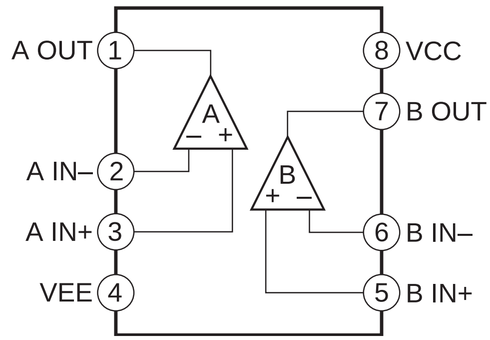
3.Pin function

Pin No.	Symbol	Function
1	EXTOUT	Output voltage is VCC-1 V when M or H level applied to CTRL pin.
2	ANTOUT	Output voltage is VCC-1 V when M or H level to CTRL pin and H level to ANT-CTRL.
3	ACCIN	Connected to ACC.
4	VDDOUT	Regular 5.7V.
5	SW5VOUT	Output voltage is 5V when M or H level applied to CTRL pin.
6	COMPOUT	Output for ACC detector.
7	ANT CTRL	L:ANT output OFF , H:ANT output ON
8	VCC	Connected to VCC.
9	BATT DET	Low battery detect.
10	AUDIO OUT	Output voltage is 9V when M or H level applied to CTRL pin.
11	CTRL	L:BIAS OFF, M:BIAS ON, H:CD ON
12	CD OUT	Output voltage is 8V when H level applied to CTRL pin.
13	ILM AJ	Adjustment pin for ILM output voltage.
14	ILM OUT	Output voltage is 10V when M or H level applied to CTRL pin.
15	GND	Connected to GND.

■ HD74HC126FP (IC771) : Changer control

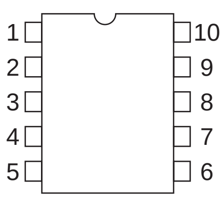


■ NJM2100M (IC821) : Operational amp

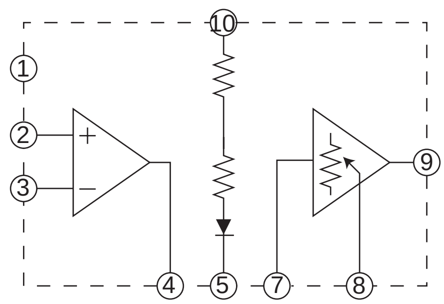


■ M5282FP-X (IC321) : E. volume

1. Pin layout



2. Block diagram

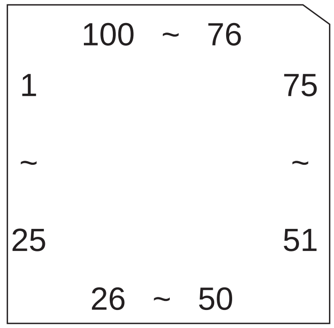


3. Pin function

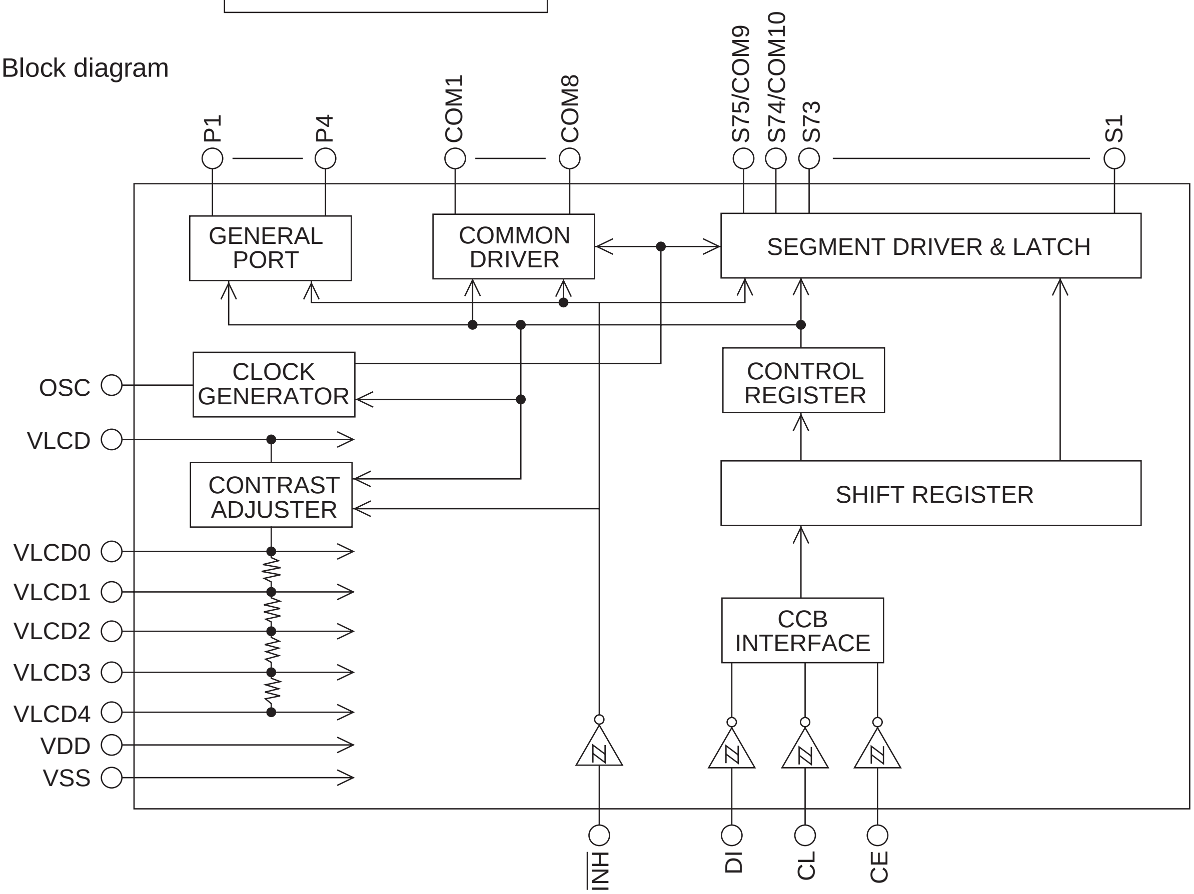
Pin No.	Symbol	Function
1	Vcc/2	Vcc/2 output for microphone amp.
2	Amp+IN	Microphone amp. positive input terminal.
3	Amp-IN	Microphone amp. negative input terminal.
4	Amp OUT	Microphone amp. output terminal.
5	GND	Ground.
6	NC	Non connection.
7	VCA IN	VCA input terminal.
8	Vc	VCA control terminal.
9	VCA OUT	VCA output terminal.
10	Vcc	Power supply.

■ LC75878W (IC601) : LCD driver

1. Pin layout



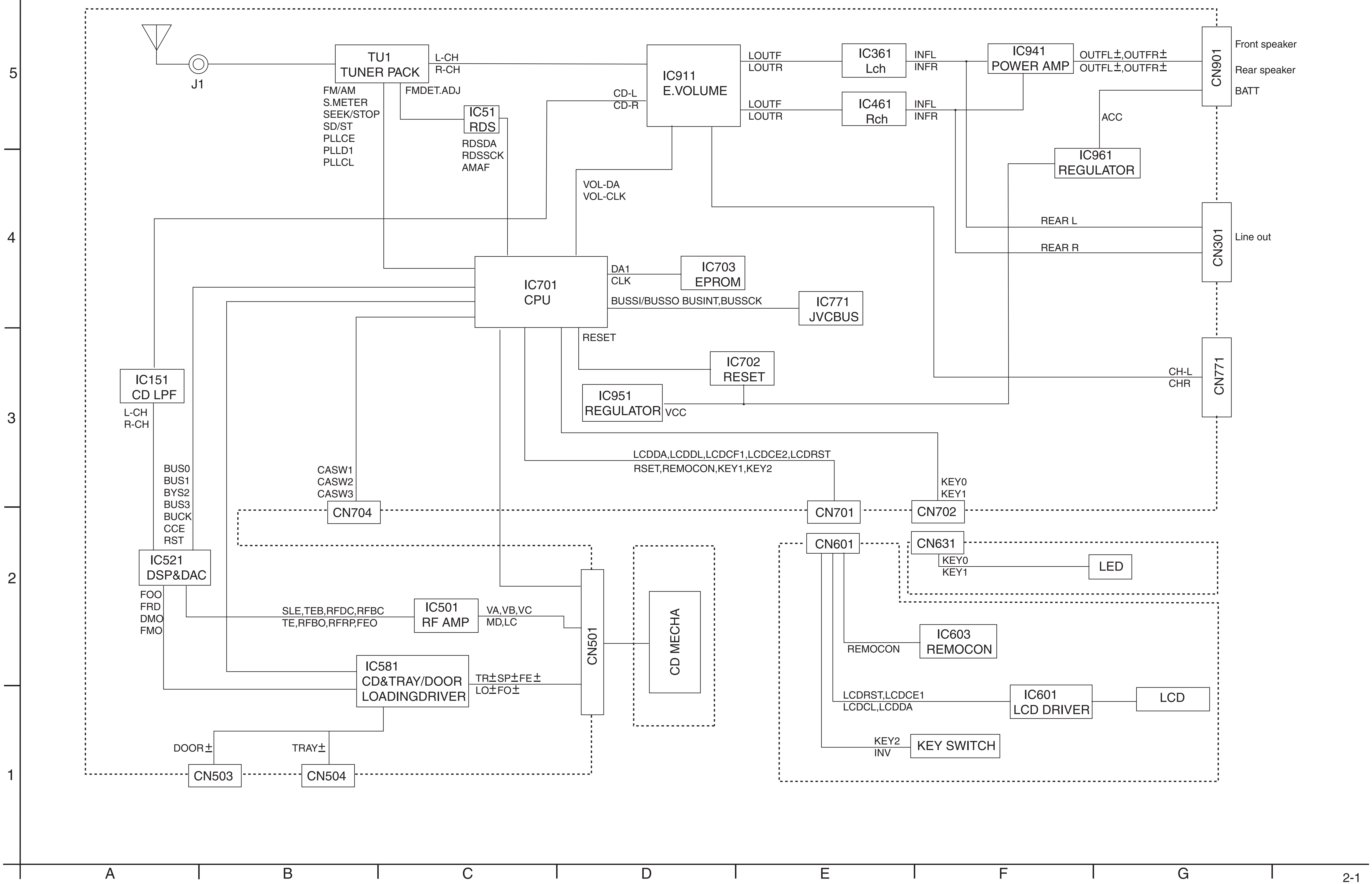
2. Block diagram



3. Pin function

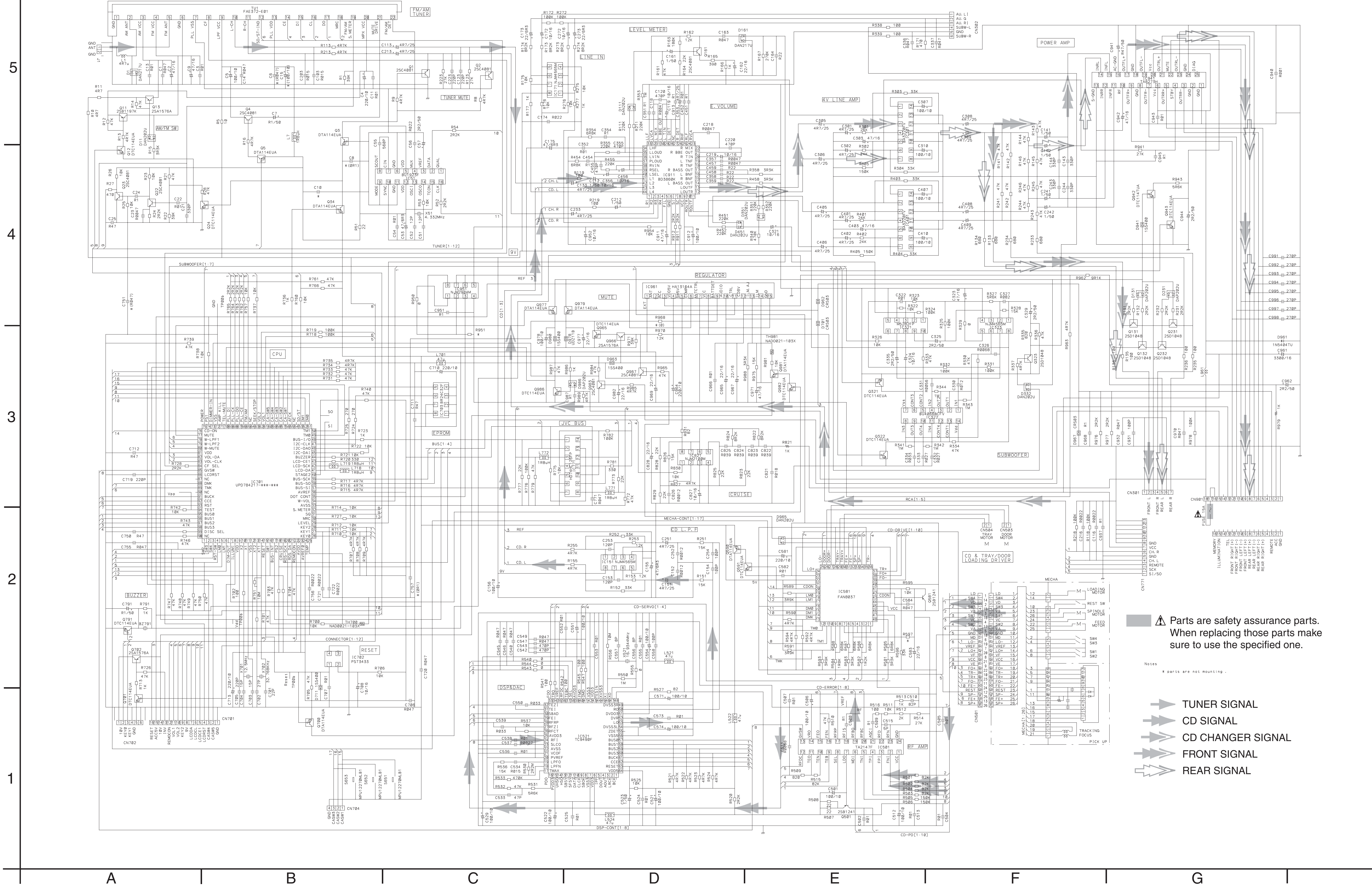
No.	Symbol	I/O	Function
1~73	SEG1~SEG73	O	Segment driver output pin.
74	SEG74	O	Segment driver output pin.
75	SEG75	O	Segment driver output pin.
76~83	COM8~COM1	O	Common driver output pin.
84~87	P1~P4	O	General-purpose output pin.
88	VDD	-	Logic block power supply pin.
89	VLCD	-	LCD driver power supply pin.
90	VLCD0	O	LCD driver bias 4/4 voltage (H-level) power pin.
91	VLCD1	I	LCD driver bias 3/4 voltage (intermediate level) power pin.
92	VLCD2	I	LCD driver bias 2/4 voltage (intermediate level) power pin.
93	VLCD3	I	LCD driver bias 1/4 voltage (intermediate level) power pin.
94	VLCD4	I	LCD driver bias 0/4 voltage (L-level) power pin.
95	VSS	-	Power supply pin to connect to ground.
96	OSC	I/O	Oscillator pin.
97	LCD RESET	I	Display off, general-purpose output port「L」fixed input pin.
98	CE	I	Chip enable
99	CL	I	Synchronization clock
100	DI	I	Transfer data

Block diagram



Standard schematic diagram

■ Main amp section



 KD-LX333R

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	DG4152010	SHEET (WIRE)	1		
	2	DG3070010	REG.IC BRACET	1		
	3	DG3005030	REAR BRACKET	1		
	4	DG3007010	REAR HEAT SINK	1		
	5	DG4117000	POWER IC BKT 2	1		
	6	YM2626001	SCREW	3		
	7	XT2640BSC	SCREW	1		
	8	EX0000490	RCA CORD ASSY	1		
	12	XT2640BSC	SCREW	2		
	13	DG3111000	LEAD PLATE	1		
⚠	14	FU15R0031	AUTO FUSE (15A)	1		
	15	DG3089020	LCD CASE	1		
	16	DG4090030	LCD FILTER	1		
	17	DG4091020	ZEBRA CONTACT	2		
	18	DG3092030	LIGHTING CASE	1		
	19	EX0000495	6P FLAT CABLE	1		
	20	EX0000535	16P FLAT CABLE	1		
	21	DG1002011	CHASSIS TOP	1		
	22	DG4114000	INSULATOR	1	CHASSIS TOP	
	23	---------------	CD MECHA	1		
	24	XT2640BSC	SCREW	3	QYSDST2604Z	
	25	DG4003030	FFC P.MECHA	1		
	26	XT2040PSB	SCREW	2	QYSPST2004M	
	27	DG4154010	SHEET (FFC)	1		
	28	DG1069001	FRONT COVER	1		
	29	DG4004000	BLIND	1	LV40828-002A	
	30	XM2030PSB	SCREW	2	QYSPSP2003M	
	32	EX0000508	WIRE ASS'Y	1		
	33	DG3010010	BOTTOM ASSY	1		
	37	DG3014000	INSULATOR	1		
	38	DG4023010	BUTTON B. GUIDE	1	LV41545-001A	
	39	YM2029000	SCREW	1		
	40	YM2626000	SCREW	3		
	41	DG4112010	PANEL COVER ASS	1		
	44	DG3015000	DOOR BASE ASSY	1	LV31605-001A	
	51	DG3022000	ROD GEAR	1	LV31610-001A	
	52	DG3131030	MOVE BKT ASS'Y	1		
	79	DG4087040	LEVER SPRING	1		
	80	YWP020300	C.WASHER	7		
	81	DG3038001	CLUTCH ASSY	1	LV30981-005A	
	82	YWP020301	C.WASHER	2		
	83	DG4039000	GEAR-4	1	LV41466-001A	
	84	DG4041000	GEAR-5	1	LV41467-001A	
	86	DG3038002	CLUTCH ASSY	1	LV30981-007A	
	88	DG4054000	GEAR-1	1	LV41463-001A	
	89	DG4055000	GEAR-2	1	LV41464-001A	
	90	DG3056000	GEAR-3	1	LV31611-001A	
	93	000013660	FEED MOTER	1	QAR0029-001	

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	95	KA2502011	2P CONECTOR ASSY	1		
	97	000013680	MOTOR	1	QAR0188-001	
	99	KA2502012	2P CONECTOR ASSY	1		
	100	XP2020P1C	SCREW	4		
	101	DG3151000	PUSH LEVER ASSY	1		
	106	DG3058000	FFC GUIDE	1		
	107	DG4116010	SHEET (FRONT BK	1		
	108	DG1140013	PANEL (BUTTON)	1		
	109	DG2141011	BUTTON (FUNC)	1		
	110	DG2142020	BUTTON (PRESET)	1		
	111	DG1139000	BUTTON BASE	1		
	112	DG4026030	PLATE SPRING	1	LV41825-004A	
	113	YM1701004	MINI SCREW	6	VKZ4777-004	
	114	DG1122002	DISPLAY PANEL	1		
	115	DG4130000	SPACER (UP,DOWN	1	LV40846-005A	
	116	DG4136000	SPACER E	1		
	117	DG3027010	D,P, PLATE	1	LV32035-001A	
	118	DG3102010	FINDER ASSY	1		
	121	DG4125000	SPACER (P)	1	LV40848-009A	
	122	DG4061010	UP DOWN BUTTON	1	LV41469-001A	
	125	DG4060000	REMOTE LENS	1	LV41505-001A	
	126	DG3143010	KNOB VOL ASSY	1		
	134	DG4104000	ENCODER GUIDE	1		
	135	DG3148000	ENCODER PLATE	1		
	136	DG3126020	KNOB SPRING	1		
	137	YM1701001	MINI SCREW	4	VKZ4777-001	
	138	DG3024000	BUTTON BASE BKT	1		
	139	DG4071020	BUTTON B SUPORT	1		
	140	YM2029000	SCREW	3		
	141	DG4029010	TENS SPRING BTM	2	LV41452-003A	
	142	XP1728P3B	SCREW	4		
	143	YM2029000	SCREW	4		
	144	XT2640BSC	SCREW	8		
	145	YM2626002	SCREW	1		
	146	YM2626000	SCREW	1		
	147	DG3008000	SIDE HEAT SINK	1		
	148	XT26A0BPC	SCREW	1		
	150	DG4115000	SHEET	2		
	151	PLN125100	NAME LABEL	1		
	152	PLC013500	LASER CAUTION	1	LV41843-001A	
	153	LV40847-002A	SPACER	2		
	156	DG4155000	SHEET(F.CVOER)	1		
	LCD 1	000101490	LCD	1		

■ Parts list (CD mechanism)

Block No. MBMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	30310101T	FRAME	1		
	2	30310103T	DANPER PIN	2		
	3	303101073T	UPPER PL(3)	1		
	4	30310108T	SEL STOP PLATE	1		
	5	30310164T	SEL ARM (L8)L	1		
	6	30310143T	SEL ARM (R)L	1		
	7	30310154T	S ARM SPRING(L8	2		
	8	30310112T	TRIG LEVER	1		
	9	30310155T	TRIG PL(Z)	1		
	10	30310115T	TRIG PL SPRING	1		
	11	30310116T	TRIG ARM	1		
	12	30310134T	FIX ARM (L)B	1		
	13	30310159T	FIX ARM (R)Z	1		
	14	30310150T	FIX PL (L)Z	1		
	15	30310156T	FIX PL (R) Z	1		
	16	30310138T	LDG GR (6)B	1		
	17	30310122T	LDG GEAR (6)SP	1		
	18	30310148T	S.L ARM(N)	1		
	19	30310125T	S.L ARM SPRING	1		
	20	30310149T	REAR DAM BKT(Z)	1		
	22	30310151T	HUNG UP SP (FZ)	2		
	23	30310129T	HUNG UP SP (R)	2		
	29	30300510T	PU GEAR(B)	1		
	32	30310544T	F.M.BASE(Z)	1		
	33	30310547T	FD GR BLK(Z)	1		
	36	30310546T	PU GUIDE(Z)	1		
	38	30310533T	THRUST SPR(M)	1		
	39	30310577T	PU M NUT(Z-S)	1		
	40	30310512T	NUT PUSH SPR PL	1		
	41	30310558T	CLP ARM(Z)	1		
	42	30310514T	CLP ARM SPRING	1		
	43	30310552T	CLAMPER(Z)	1		
	44	30310541T	8CM STOPPER(M)	1		
	45	30310566T	8CM STOP SPP Z	1		
	48	30310557T	CLAMPER PLATE(Z	1		
	49	30310524T	DAMPER (J)	3		
	50	30310525T	CLP ARM SPR (L)	1		
	51	30310545T	F SCREW GUIDE(Z	1		
	56	64180405T	DET SW	1	ESE11SF4	
	57	QAL0230-001	C.D PICK (SONY)	1		
	61	30311035T	FPC HOLDER(Z)	1		
	62	19501403T	WIRE CLAMPER	4		
	63	30311045T	PICK UP FPC(Z-S	1		
	64	30311044T	CONNECT.PCB(Z-S	1		
	65	30311038T	WIRE (5P-Z)	1		
	66	30311039T	WIRE (LD-Z)	1		
	67	30311040T	WIRE (FD-Z)	1		
	68	30311041T	WIRE (RS-Z)	1		

■ Parts list (CD mechanism)

Block No. MBMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	70	64180402T	DET SWITCH	2	ESE22MH1	
	71	64180403T	DET SWITCH	2	ESE22MH3	
	72	68150232T	CONNECTOR	1	TKC-W26X-C1	
	79	30311105T	SOPPORT PLATE	1		
	80	30311138T	GR MT BLK(N)	1		
	81	30311109T	LDG GEAR (2)	1		
	82	30311110T	LDG GEAR (3)	1		
	84	30311112T	LDG GEAR (5)	1		
	86	30311131T	LDG ROLLER	2		
	88	30311118T	L.P SPRING (L)	1		
	89	30311119T	L.P SPRING (R)	1		
	90	30311123T	SW PCB	1		
	91	30311124T	SW ACTUATOR	1		
	92	30311129T	LDG BELT	1		
	93	30311140T	FRONT BRKT (J)	1		
	100	9C0620503T	C B TAP SCREW	2	M2X5	
	101	9C2020401T	C SCREW TS.G	5	M2X4	
	102	9C4320403T	C B TAP SCREW	4	M2X4	
	103	9C0117223T	SCREW	2	M1.7X2.2	
	104	9C0917703T	C TAP SCREW S3	1	M1.7X7	
	105	9C0320201T	C TAP SCREW S3	1	M2X2	
	106	9C4920013T	C TAP SCREW S3	2	M2X10	
	107	9C4920603T	C TAP SCREW B3	4	M2X6	
	108	9P0220031T	TAMS SCREW	2	M2X3	
	110	9C0420253	C TAP SCREW	1	M2X2.5	
	113	9W0330276	NW BLUE	2	2.9X5X0.3	
	116	9W0725030T	LUMILAR W	1	2.3X9.8X0.25	
	117	9W0640030T	WASHER	1	1.4X3.2X0.4	
	130	303105310T	FEED MO ASSY	1		
	131	303105311T	SPINDLE MO ASSY	1		
	132	303105312T	FEED SCREW ASSY	1		
	133	303111301T	LDG MOTOR ASSY	1		
	134	303111302T	RDG RLR SFT ASY	1		
	135	303105502T	T.T.BASE ASSY	1		

■ Electrical parts list (Main board)

Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	BZ791	000393760	BUZZER	CD11PA-XZ	
	CN301	KN2507297	CONN.TERMINAL	7P BASE POST	
	CN302	KN2506297	CONN.TERMINAL	6P BASE POST	
	CN501	KZ042260L	CONN.TERMINAL	26P CONNECTOR	
	CN503	KN2502091	CONN.TERMINAL	2P BASE POST	
	CN504	KN2502091	CONN.TERMINAL	2P BASE POST	
	CN701	KZ041160L	CONN.TERMINAL	16P FPC CONNECT	
	CN702	KZ040060L	CONN.TERMINAL	6P FPC CONNECTO	
	CN704	KN530409L	CONN.TERMINAL	4P BASE POST	
	CN771	KX0040800	CONN.TERMINAL	8P BUS CONNECTO	
	CN901	KX0071600	CONN.TERMINAL	DC CONNECTOR (1	
	C1	CY473623J	C.CAPACITOR	0.047 MF	
	C103	CY153623J	C.CAPACITOR	0.015 MF	
	C11	CY103623J	C.CAPACITOR	0.01 MF	
	C112	CE1056468	E.CAPACITOR	1 MF/50V	
	C113	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C116	CY222623J	C.CAPACITOR	0.0022MF	
	C118	CY472623J	C.CAPACITOR	0.0047MF	
	C119	CE1063468	E.CAPACITOR	10 MF/16V	
	C120	CZ4716D2J	C.CAPACITOR	470 PF	
	C123	CZ2216D2J	C.CAPACITOR	220 PF	
	C13	CY103623J	C.CAPACITOR	0.01 MF	
	C133	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C14	CY473623J	C.CAPACITOR	0.047 MF	
	C141	CE1056468	E.CAPACITOR	1 MF/50V	
	C142	CE1056468	E.CAPACITOR	1 MF/50V	
	C143	CZ3316D2J	C.CAPACITOR	330 PF	
	C144	CZ3316D2J	C.CAPACITOR	330PF	
	C151	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C152	CY122623J	C.CAPACITOR	0.0012MF	
	C153	CZ1216D2J	C.CAPACITOR	120PF	
	C154	CZ1016D2J	C.CAPACITOR	100PF	
	C155	CE4760468	E.CAPACITOR	47 MF/6.3V	
	C156	CE1071468	E.CAPACITOR	100 MF/10V	
	C161	CE1056468	E.CAPACITOR	1 MF/50V	
	C162	CE2263468	E.CAPACITOR	22 MF/16V	
	C163	CY473623J	C.CAPACITOR	0.047 MF	
	C164	CY224122J	C.CAPACITOR	0.22MF	
	C172	CE1063468	E.CAPACITOR	10 MF/16V	
	C173	CE2260468	E.CAPACITOR	22 MF/6.3V	
	C174	CY223623J	C.CAPACITOR	0.022 MF	
	C175	CE4760468	E.CAPACITOR	47 MF/6.3V	
	C2	CE4763468	E.CAPACITOR	47 MF/16V	
	C203	CY153623J	C.CAPACITOR	0.015 MF	
	C21	CZ3316D2J	C.CAPACITOR	330 PF	
	C212	CE1056468	E.CAPACITOR	1 MF/50V	
	C213	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C216	CY222623J	C.CAPACITOR	0.0022MF	
	C218	CY472623J	C.CAPACITOR	0.0047MF	
	C219	CE1063468	E.CAPACITOR	10 MF/16V	
	C22	CY103623J	C.CAPACITOR	0.01 MF	
	C220	CZ4716D2J	C.CAPACITOR	470PF	
	C223	CZ2216D2J	C.CAPACITOR	220 PF	
	C23	CY472623J	C.CAPACITOR	0.0047MF	
	C233	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C24	CY104423J	C.CAPACITOR	0.1 MF	
	C241	CE1056468	E.CAPACITOR	1 MF/50V	
	C242	CE1056468	E.CAPACITOR	1 MF/50V	
	C243	CZ3316D2J	C.CAPACITOR	330PF	
	C244	CZ3316D2J	C.CAPACITOR	330 PF	
	C25	CY474122J	C.CAPACITOR	0.47 MF	
	C251	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C252	CY122623J	C.CAPACITOR	0.0012MF	
	C253	CZ1216D2J	C.CAPACITOR	120 PF	
	C254	CZ1016D2J	C.CAPACITOR	100PF	
	C272	CE1063468	E.CAPACITOR	10 MF/16V	
	C273	CE2260468	E.CAPACITOR	22 MF/6.3V	
	C3	CY103623J	C.CAPACITOR	0.01 MF	
	C301	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C302	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C303	CE4763468	E.CAPACITOR	47 MF/16V	
	C305	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C306	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C307	CE1071468	E.CAPACITOR	100 MF/10V	
	C308	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C309	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C310	CE1071468	E.CAPACITOR	100 MF/10V	
	C321	CE1063468	E.CAPACITOR	10 MF/16V	
	C322	CY103623J	C.CAPACITOR	0.01 MF	
	C323	CE4763468	E.CAPACITOR	47 MF/16V	
	C324	CE1063468	E.CAPACITOR	10 MF/16V	
	C325	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C326	CY682623J	C.CAPACITOR	0.0068MF	
	C327	CY823423J	C.CAPACITOR	0.082 MF	
	C329	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C330	CY123623J	C.CAPACITOR	0.012MF	
	C331	CY562623J	C.CAPACITOR	0.0056MF	
	C332	CY273623J	C.CAPACITOR	0.027MF	
	C333	CY273623J	C.CAPACITOR	0.027MF	
	C334	CY333623J	C.CAPACITOR	0.033MF	
	C335	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C336	CY473623J	C.CAPACITOR	0.047 MF	
	C337	CY473623J	C.CAPACITOR	0.047 MF	
	C351	CY104423J	C.CAPACITOR	0.1 MF	
	C352	CY103623J	C.CAPACITOR	0.01 MF	
	C353	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C354	CY104423J	C.CAPACITOR	0.1 MF	
	C355	CZ4716D2J	C.CAPACITOR	470PF	
	C356	CE1063468	E.CAPACITOR	10 MF/16V	
	C357	CY472623J	C.CAPACITOR	0.0047MF	
	C358	CY224122J	C.CAPACITOR	0.22MF	
	C359	CY224122J	C.CAPACITOR	0.22 MF	
	C4	CE2271468	E.CAPACITOR	220 MF/10V	
	C401	CE4754468	E.CAPACITOR	2.2 MF/50V	
	C402	CE4754468	E.CAPACITOR	2.2 MF/50V	
	C403	CE4763468	E.CAPACITOR	47 MF/16V	
	C405	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C406	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C407	CE1071468	E.CAPACITOR	100 MF/10V	
	C408	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C409	CE4754468	E.CAPACITOR	4.7 MF/25V	
	C410	CE1071468	E.CAPACITOR	100 MF/10V	
	C451	CY104423J	C.CAPACITOR	0.1MF	
	C452	CY103623J	C.CAPACITOR	0.01MF	
	C454	CY104423J	C.CAPACITOR	0.1 MF	
	C455	CZ4716D2J	C.CAPACITOR	470 PF	
	C456	CE1063468	E.CAPACITOR	10 MF/16V	
	C457	CY472623J	C.CAPACITOR	0.0047MF	
	C458	CY224122J	C.CAPACITOR	0.22 MF	
	C459	CY224122J	C.CAPACITOR	0.22MF	
	C5	CE1071468	E.CAPACITOR	100 MF/10V	
	C501	CE1071468	E.CAPACITOR	100 MF/10V	
	C502	CY103623J	C.CAPACITOR	0.01 MF	
	C504	CY103623J	C.CAPACITOR	0.01 MF	
	C505	CY103623J	C.CAPACITOR	0.01MF	
	C506	CE1071468	E.CAPACITOR	100 MF/10V	

■ Electrical parts list (Main board)

Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	C507	CY103623J	C.CAPACITOR	0.01 MF	
	C508	CY104423J	C.CAPACITOR	0.1 MF	
	C509	CY104423J	C.CAPACITOR	0.1 MF	
	C51	CZ1206D2J	C.CAPACITOR	12 PF	
	C510	CZ8206D2J	C.CAPACITOR	82PF	
	C511	CY682623J	C.CAPACITOR	0.0068MF	
	C512	CE1071468	E.CAPACITOR	100 MF/10V	
	C513	CY103623J	C.CAPACITOR	0.01 MF	
	C515	CZ5R06A2J	C.CAPACITOR	5 PF	
	C52	CZ1206D2J	C.CAPACITOR	12 PF	
	C521	CE1071468	E.CAPACITOR	100 MF/10V	
	C522	CE1071468	E.CAPACITOR	100 MF/10V	
	C523	CE1056468	E.CAPACITOR	1 MF/50V	
	C524	CY103623J	C.CAPACITOR	0.01 MF	
	C525	CY103623J	C.CAPACITOR	0.01 MF	
	C529	CE1071468	E.CAPACITOR	100 MF/10V	
	C53	CE4760468	E.CAPACITOR	47 MF/6.3V	
	C533	CZ4706D2J	C.CAPACITOR	47PF	
	C534	CY153623J	C.CAPACITOR	0.015MF	
	C536	CY103623J	C.CAPACITOR	0.01 MF	
	C537	CY272623J	C.CAPACITOR	0.0027MF	
	C538	CY103623J	C.CAPACITOR	0.01 MF	
	C539	CY333623J	C.CAPACITOR	0.033 MF	
	C54	CY103623J	C.CAPACITOR	0.01 MF	
	C540	CY473623J	C.CAPACITOR	0.047 MF	
	C542	CZ4716D2J	C.CAPACITOR	470 PF	
	C543	CZ4716D2J	C.CAPACITOR	470 PF	
	C545	CY473623J	C.CAPACITOR	0.047 MF	
	C546	CY473623J	C.CAPACITOR	0.047 MF	
	C547	CY473623J	C.CAPACITOR	0.047 MF	
	C549	CY473623J	C.CAPACITOR	0.047 MF	
	C55	CZ5616D2J	C.CAPACITOR	560 PF	
	C550	CY333623J	C.CAPACITOR	0.033MF	
	C551	CE1071468	E.CAPACITOR	100 MF/10V	
	C552	CY103623J	C.CAPACITOR	0.01MF	
	C553	CY103623J	C.CAPACITOR	0.01MF	
	C554	CE1071468	E.CAPACITOR	100 MF/10V	
	C555	CY103623J	C.CAPACITOR	0.01 MF	
	C556	CZ8R06B2J	C.CAPACITOR	8 PF	
	C557	CZ8R06B2J	C.CAPACITOR	8 PF	
	C558	CZ1016D2J	C.CAPACITOR	100PF	
	C56	CY223623J	C.CAPACITOR	0.022 MF	
	C57	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C571	CE1071468	E.CAPACITOR	100 MF/10V	
	C573	CY103623J	C.CAPACITOR	0.01MF	
	C574	CE1071468	E.CAPACITOR	100 MF/10V	
	C581	CE2271468	E.CAPACITOR	220 MF/10V	
	C582	CY103623J	C.CAPACITOR	0.01 MF	
	C583	CE2263468	E.CAPACITOR	22 MF/16V	
	C584	CY473623J	C.CAPACITOR	0.047MF	
	C7	CE1046468	E.CAPACITOR	0.1 MF/50V	
	C701	CZ2206D2J	C.CAPACITOR	22PF	
	C702	CZ2706D2J	C.CAPACITOR	27PF	
	C703	CZ1506D2J	C.CAPACITOR	15 PF	
	C704	CZ1506D2J	C.CAPACITOR	15 PF	
	C705	CZ2216D2J	C.CAPACITOR	220 PF	
	C706	CY473623J	C.CAPACITOR	0.047MF	
	C707	CY103623J	C.CAPACITOR	0.01 MF	
	C708	CE1063468	E.CAPACITOR	10 MF/16V	
	C710	CE2271468	E.CAPACITOR	220 MF/10V	
	C711	CY474122J	C.CAPACITOR	0.47 MF	
	C712	CY474122J	C.CAPACITOR	0.47MF	
	C713	CE2271468	E.CAPACITOR	220 MF/10V	
	C719	CZ2216D2J	C.CAPACITOR	220PF	
	C720	CY473623J	C.CAPACITOR	0.047 MF	
	C721	CY222623J	C.CAPACITOR	0.0022MF	
	C722	CY222623J	C.CAPACITOR	0.0022MF	
	C750	CY474122J	C.CAPACITOR	0.47 MF	
	C755	CY473623J	C.CAPACITOR	0.047 MF	
	C756	CY222623J	C.CAPACITOR	0.0022MF	
	C771	CY473623J	C.CAPACITOR	0.047 MF	
	C791	CE1046468	E.CAPACITOR	0.1 MF/50V	
	C821	CY183623J	C.CAPACITOR	0.018 MF	
	C822	CY393623J	C.CAPACITOR	0.039MF	
	C823	CY393623J	C.CAPACITOR	0.039MF	
	C824	CY393623J	C.CAPACITOR	0.039 MF	
	C825	CY393623J	C.CAPACITOR	0.039 MF	
	C826	CY122623J	C.CAPACITOR	0.0012MF	
	C827	CE1063468	E.CAPACITOR	10 MF/16V	
	C828	CE2263468	E.CAPACITOR	22 MF/16V	
	C9	CE4763468	E.CAPACITOR	47 MF/16V	
	C911	CE4763468	E.CAPACITOR	47 MF/16V	
	C912	CE1071468	E.CAPACITOR	100 MF/10V	
	C913	CY104423J	C.CAPACITOR	0.1MF	
	C931	CZ1016D2J	C.CAPACITOR	100PF	
	C932	CY473623J	C.CAPACITOR	0.047 MF	
	C937	CY104423J	C.CAPACITOR	0.1 MF	
	C940	CY102623J	C.CAPACITOR	0.001 MF	
	C941	CE4746468	E.CAPACITOR	0.47 MF/50V	
	C942	CE4763468	E.CAPACITOR	47 MF/16V	
	C943	CY103603J	C.CAPACITOR	0.01 MF	
	C944	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C945	CY104423J	C.CAPACITOR	0.1MF	
	C951	CY104423J	C.CAPACITOR	0.1 MF	
	C952	CE1063468	E.CAPACITOR	10 MF/16V	
	C961	CE3383541	E.CAPACITOR	3300MF/16V	
	C962	CE2256468	E.CAPACITOR	2.2 MF/50V	
	C964	CE2271468	E.CAPACITOR	220 MF/10V	
	C965	CE2263468	E.CAPACITOR	22 MF/16V	
	C966	CY103623J	C.CAPACITOR	0.01 MF	
	C967	CE2263468	E.CAPACITOR	22 MF/16V	
	C968	CY104423J	C.CAPACITOR	0.1 MF	
	C969	CE2263468	E.CAPACITOR	22 MF/16V	
	C970	CY473623J	C.CAPACITOR	0.047MF	
	C971	CE4763468	E.CAPACITOR	47 MF/16V	
	C977	CE2263468	E.CAPACITOR	22 MF/16V	
	C978	CE1071468	E.CAPACITOR	100 MF/10V	
	C982	CE2263468	E.CAPACITOR	22 MF/16V	
	C987	CY104423J	C.CAPACITOR	0.1MF	
	C991	CZ2716D2J	C.CAPACITOR	270PF	
	C992	CZ2716D2J	C.CAPACITOR	270PF	
	C993	CZ2716D2J	C.CAPACITOR	270PF	
	C994	CZ2716D2J	C.CAPACITOR	270PF	
	C995	CZ2716D2J	C.CAPACITOR	270PF	
	C996	CZ2716D2J	C.CAPACITOR	270PF	
	C997	CZ2716D2J	C.CAPACITOR	270PF	
	C998	CZ2716D2J	C.CAPACITOR	270PF	
	D1	DIAN217UL	SI.DIODE		
	D11	DIAN202UL	DIODE ARRAY	DAN202U-W	
	D111	DIAN202UL	DIODE ARRAY	DAN202U-W	
	D131	DIAP202UL	DIODE ARRAY	DAP202U-X	
	D161	DIAN217UL	SI.DIODE		
	D231	DIAP202UL	DIODE ARRAY	DAP202U-X	
	D332	DIAN202UL	DIODE ARRAY	DAN202U-W	
	D351	DIAN202UL	DIODE ARRAY	DAN202U-W	
	D451	DIAN202UL	DIODE ARRAY	DAN202U-W	

■ Electrical parts list (Main board)

Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	D701	DI0CRS03L	SI.DIODE	CRS03-X	
	D711	DI1SS400L	SI.DIODE		
	D941	DI1SS400L	SI.DIODE		
	D961	000372050	ZENER DIODE	1N5404TU-15	
	D962	DI0CRS03L	SI.DIODE	CRS03-X	
	D963	DI1SS400L	SI.DIODE		
	D965	DIAN202UL	DIODE ARRAY	DAN202U-W	
	D967	DI0CRS03L	SI.DIODE	CRS03-X	
	D978	Z0UDZ11BL	ZENER DIODE	UDZ11B-X	
	D980	DI1SS400L	SI.DIODE		
	D986	DIAP202UL	DIODE ARRAY	DAP202U-X	
	IC151	000474740-T	IC	NJM4565MD	
	IC171	000474740-T	IC	NJM4565MD	
	IC301	000874370-T	IC	BA3220FV-X	
	IC321	000874410-T	IC	M5282FP-XE	
	IC322	000874420-T	IC	BU4066BCFV	
	IC323	000474740-T	IC	NJM4565MD	
	IC401	000874370-T	IC	BA3220FV-X	
	IC501	000874440-T	IC	TA2147F-X	
	IC51	000874740-T	IC	BU1923F	
	IC521	000874450	IC	TC9490F	
	IC581	000874460	IC	FAN8037	
	IC701	000974270	IC	UPD784217AGC-**	
	IC702	000974280-T	IC	PST3433UL	
	IC703	000874700-T	IC	BR24C32F	
	IC771	000774040-T	IC	HD74HC126FP	
	IC821	000874400-T	IC	NJM2100M	
	IC911	000874470	IC	BD3860K	
	IC941	000874560	IC	TA8273H	
	IC951	000574840-T	IC	MJM2904M	
	IC961	000874970	IC	HA13164A	
	J1	EX0000487	ANTENNA JACK		
	L1	LC4R7J257	CHOKE COIL	4.7MH	
	L521	LC470J10J	CHOKE COIL	LC 47MH	
	L522	LC470J10J	CHOKE COIL	LC 47MH	
	L524	LC470J10J	CHOKE COIL	LC 47MH	
	L7	LC1R8K24J	RF COIL	1.8MH	
	L701	LC470J10J	CHOKE COIL	LC 47MH	
	L718	LC1R8K24J	RF COIL	LC 1.8MH	
	L719	LC1R8K24J	RF COIL	1.8MH	
	L771	LC1R8K24J	RF COIL	1.8MH	
	L772	LC1R8K24J	RF COIL	1.8MH	
	L961	000125560	CHOKE COIL		
	Q1	TRC4081(QRS)L	TRANSISTOR	2SC4081 (QRS)	
	Q11	TRB1197(QR)L	TRANSISTOR	2SB1197K/QR/X	
	Q12	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q13	TRA1576(QRS)L-A	TRANSISTOR	2SA1576A/QR/-X	
	Q131	TRD1048(678)L	TRANSISTOR	2SD1048/6-7/-X	
	Q132	TRD1048(678)L	TRANSISTOR	2SD1048/6-7/-X	
	Q161	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q2	TRC4081(QRS)L	TRANSISTOR	2SC4081 (QRS)	
	Q22	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q23	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q231	TRD1048(678)L	TRANSISTOR	2SD1048/6-7/-X	
	Q232	TRD1048(678)L	TRANSISTOR	2SD1048/6-7/-X	
	Q24	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q3	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q321	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q322	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q323	TRD1048(678)L	TRANSISTOR	2SD1048/6-7/-X	
	Q34	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q4	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q5	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q501	TRB1241(PQR)8	TRANSISTOR	2SB1241 (PQR)	
	Q581	TRB1241(PQR)8	TRANSISTOR	2SB1241 (PQR)	
	Q590	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q591	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q700	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q701	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q702	TRA1576(QRS)L-A	TRANSISTOR	2SA1576A/QR/-X	
	Q791	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q942	TRC114TUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q943	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q965	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q966	TRA1576(QRS)L-A	TRANSISTOR	2SA1576A (QRS)	
	Q967	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q977	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q979	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q981	TRA114EUL-A	DIGI.TRANSISTOR	DTA114EUA-X	
	Q982	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	Q983	TRC4081(QRS)L	TRANSISTOR	2SC4081 (QRS)	
	Q986	TRC114EUL-A	DIGI.TRANSISTOR	DTC114EUA-X	
	R1	RK393JA0J	COMP.RESISTOR	1/10W 39 K	
	R10	RK4R7JA0J	RESISTOR	1/10W 4.7	
	R11	RK4R7JA0J	RESISTOR	1/10W 4.7	
	R111	RK224JA0J	COMP.RESISTOR	1/10W 220K	
	R113	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R118	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R119	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R12	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R123	RK273JA0J	COMP.RESISTOR	1/10W 27 K	
	R13	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R131	RK222JA0J	C.RESISTOR	1/10W 2.2K	
	R132	RK222JA0J	C.RESISTOR	1/10W 2.2K	
	R133	RK681JA0J	C.RESISTOR	1/10W 680	
	R134	RK681JA0J	C.RESISTOR	1/10W 680	
	R135	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R136	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R14	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R141	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R142	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R143	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R144	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R145	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R146	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R15	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R151	RK153JA0J	COMP.RESISTOR	1/10W 15K	
	R152	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R153	RK123JA0J	C.RESISTOR	1/10W 12 K	
	R155	RK472JA0J	C.RESISTOR	1/10W 4.7K	
	R16	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R161	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R162	RK123JA0J	C.RESISTOR	1/10W 12K	
	R163	RK184JA0J	C.RESISTOR	1/10W 180 K	
	R164	RK223JA0J	COMP.RESISTOR	1/10W 22 K	
	R165	RK391JA0J	C.RESISTOR	1/10W 390	
	R166	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R167	RK274JA0J	COMP.RESISTOR	1/10W 270K	
	R171	RK471JA0J	C.RESISTOR	1/10W 470	
	R172	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R173	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R174	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R175	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R176	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R177	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R21	RK473JA0J	COMP.RESISTOR	1/10W 47 K	

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R211	RK224JA0J	COMP.RESISTOR	1/10W 220K	
	R213	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R218	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R219	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R22	RK393JA0J	COMP.RESISTOR	1/10W 39 K	
	R223	RK273JA0J	COMP.RESISTOR	1/10W 27 K	
	R23	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R231	RK222JA0J	C.RESISTOR	1/10W 2.2K	
	R232	RK222JA0J	C.RESISTOR	1/10W 2.2K	
	R233	RK681JA0J	C.RESISTOR	1/10W 680	
	R234	RK681JA0J	C.RESISTOR	1/10W 680	
	R235	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R236	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R24	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R241	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R242	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R243	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R244	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R245	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R246	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R25	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R251	RK153JA0J	COMP.RESISTOR	1/10W 15K	
	R252	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R253	RK123JA0J	C.RESISTOR	1/10W 12 K	
	R255	RK472JA0J	C.RESISTOR	1/10W 4.7K	
	R26	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R27	RK471JA0J	C.RESISTOR	1/10W 470	
	R272	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R273	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R274	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R275	RK103JA0J	C.RESISTOR	1/10W 10K	
	R276	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R277	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R28	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R301	RK243JA0J	C.RESISTOR	1/10W 24 K	
	R302	RK243JA0J	C.RESISTOR	1/10W 24 K	
	R303	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R304	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R305	RK154JA0J	C.RESISTOR	1/10W 150 K	
	R322	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R323	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R324	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R325	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R326	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R327	RK562JA0J	C.RESISTOR	1/10W 5.6 K	
	R328	RK153JA0J	COMP.RESISTOR	1/10W 15 K	
	R329	RK000JA0J	C.RESISTOR	1/10W 0	
	R330	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R331	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R332	RK104JA0J	COMP.RESISTOR	1/10W 100K	
	R333	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R334	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R335	RK821JA0J	C.RESISTOR	1/10W 820	
	R336	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R337	RK472JA0J	C.RESISTOR	1/10W 4.7K	
	R338	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R339	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R340	RK474JA0J	COMP.RESISTOR	1/10W 470K	
	R341	RK105JA0J	C.RESISTOR	1/10W 1M	
	R342	RK105JA0J	C.RESISTOR	1/10W 1M	
	R343	RK105JA0J	C.RESISTOR	1/10W 1 M	
	R344	RK105JA0J	C.RESISTOR	1/10W 1 M	
	R351	RK224JA0J	COMP.RESISTOR	1/10W 220K	
	R352	RK224JA0J	COMP.RESISTOR	1/10W 220K	
	R353	RK105JA0J	C.RESISTOR	1/10W 1 M	
	R354	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R355	RK224JA0J	COMP.RESISTOR	1/10W 220K	
	R358	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R401	RK243JA0J	C.RESISTOR	1/10W 24 K	
	R402	RK243JA0J	C.RESISTOR	1/10W 24K	
	R403	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R404	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R405	RK154JA0J	C.RESISTOR	1/10W 150 K	
	R451	RK224JA0J	COMP.RESISTOR	1/10W 220 K	
	R452	RK224JA0J	COMP.RESISTOR	1/10W 220 K	
	R454	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R455	RK224JA0J	COMP.RESISTOR	1/10W 220 K	
	R458	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R5	RK100JA0J	C.RESISTOR	1/10W 10	
	R501	RK823JA0J	COMP.RESISTOR	1/10W 82 K	
	R502	RK823JA0J	COMP.RESISTOR	1/10W 82 K	
	R503	RK823JA0J	COMP.RESISTOR	1/10W 82 K	
	R504	RK823JA0J	COMP.RESISTOR	1/10W 82 K	
	R505	RK154JA0J	C.RESISTOR	1/10W 150 K	
	R506	RK154JA0J	C.RESISTOR	1/10W 150 K	
	R507	RK220JA0J	C.RESISTOR	1/10W 22	
	R508	RK220JA0J	C.RESISTOR	1/10W 22	
	R509	RK821JA1J	C.RESISTOR	1/10W 820	
	R51	RK220JA0J	C.RESISTOR	1/10W 22	
	R510	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R511	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R512	RK202JA0J	C.RESISTOR	1/10W 2 K	
	R513	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R514	RK273JA0J	COMP.RESISTOR	1/10W 27 K	
	R515	RK823JA0J	COMP.RESISTOR	1/10W 82K	
	R516	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R52	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R520	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R521	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R522	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R523	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R524	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R525	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R527	RK820JA0J	C.RESISTOR	1/10W 82	
	R53	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R530	RK225JA0J	C.RESISTOR	1/10W 2.2M	
	R531	RK562JA0J	C.RESISTOR	1/10W 5.6 K	
	R532	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R533	RK474JA0J	COMP.RESISTOR	1/10W 470K	
	R536	RK153JA0J	COMP.RESISTOR	1/10W 15K	
	R537	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R54	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R540	RK000JA0J	C.RESISTOR	1/10W 0	
	R541	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R542	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R543	RK000JA0J	C.RESISTOR	1/10W 0	
	R544	RK000JA0J	C.RESISTOR	1/10W 0	
	R545	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R547	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R550	RK105JA0J	C.RESISTOR	1/10W 1 M	
	R555	RK000JA0J	C.RESISTOR	1/10W 0	
	R556	RK106JA0J	C.RESISTOR	1/10W 10 M	
	R581	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R582	RK122JA0J	C.RESISTOR	1/10W 1.2 K	
	R583	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R584	RK182JA0J	C.RESISTOR	1/10W 1.8 K	

■ Electrical parts list (Main board) Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	R585	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R586	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R587	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R588	RK682JA0J	C.RESISTOR	1/10W 6.8 K	
	R589	RK392JA0J	C.RESISTOR	1/10W 3.9 K	
	R590	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R591	RK392JA0J	C.RESISTOR	1/10W 3.9 K	
	R592	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R593	RK392JA0J	C.RESISTOR	1/10W 3.9 K	
	R594	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R595	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R596	RK333JA0J	COMP.RESISTOR	1/10W 33 K	
	R700	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R701	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R702	RK101JA0J	UNF.C.RESISTOR	1/10W 100	
	R703	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R704	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R705	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R706	RK103JA0J	C.RESISTOR	1/10W 10K	
	R707	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R708	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R709	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R710	RK103JA0J	C.RESISTOR	1/10W 10K	
	R711	RK103JA0J	C.RESISTOR	1/10W 10K	
	R712	RK103JA0J	C.RESISTOR	1/10W 10K	
	R713	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R714	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R715	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R716	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R717	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R718	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R719	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R720	RK331JA0J	C.RESISTOR	1/10W 330	
	R721	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R722	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R723	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R724	RK271JA0J	C.RESISTOR	1/10W 270	
	R725	RK271JA0J	C.RESISTOR	1/10W 270	
	R726	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R727	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R728	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R731	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R732	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R733	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R734	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R735	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R736	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R737	RK103JA0J	C.RESISTOR	1/10W 10K	
	R738	RK103JA0J	C.RESISTOR	1/10W 10K	
	R739	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R740	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R742	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R743	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R746	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R747	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R748	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R749	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R750	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R751	RK106JA0J	C.RESISTOR	1/10W 10 M	
	R757	RK103JA0J	C.RESISTOR	1/10W 10K	
	R760	RK103JA0J	C.RESISTOR	1/10W 10K	
	R761	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R762	RK222JA0J	C.RESISTOR	1/10W 2.2 K	

⚠	Item	Parts number	Parts name	Remarks	Area
	R763	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R764	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R765	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R766	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R772	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R773	RK223JA0J	COMP.RESISTOR	1/10W 22 K	
	R775	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R776	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R777	RK223JA0J	COMP.RESISTOR	1/10W 22 K	
	R779	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R781	RK331JA0J	C.RESISTOR	1/10W 330	
	R782	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R791	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R8	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R821	RD102J3CQ	C.RESISTOR	1/4W 1K	
	R822	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R823	RK223JA0J	COMP.RESISTOR	1/10W 22K	
	R824	RK822JA0J	C.RESISTOR	1/10W 8.2 K	
	R825	RK223JA0J	COMP.RESISTOR	1/10W 22K	
	R826	RK153JA0J	COMP.RESISTOR	1/10W 15 K	
	R827	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R828	RK223JA0J	COMP.RESISTOR	1/10W 22 K	
	R829	RK223JA0J	COMP.RESISTOR	1/10W 22 K	
	R830	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R831	RK820JA0J	C.RESISTOR	1/10W 82	
	R9	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R908	RK104JA1J	C.RESISTOR	1/10W 100K	
	R911	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R912	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R941	RK273JA0J	COMP.RESISTOR	1/10W 27K	
	R943	RK562JA0J	C.RESISTOR	1/10W 5.6 K	
	R950	RK000JA0J	C.RESISTOR	1/10W 0	
	R954	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R962	RK912JA0J	C.RESISTOR	1/10W 9.1 K	
	R963	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R965	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R970	RK123JA0J	C.RESISTOR	1/10W 12 K	
	R971	RK393JA0J	COMP.RESISTOR	1/10W 39 K	
	R975	RK153JA0J	COMP.RESISTOR	1/10W 15K	
	R976	RK222J41J	RESISTOR	1/8W 2.2 K	
	R977	RK222J41J	RESISTOR	1/8W 2.2 K	
	R979	RD102J3CQ	C.RESISTOR	1/4W 1K	
	R981	RK183JA0J	COMP.RESISTOR	1/10W 18K	
	R984	RK473JA0J	COMP.RESISTOR	1/10W 47 K	
	R985	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R986	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R987	RK473JA0J	COMP.RESISTOR	1/10W 47K	
	R988	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R989	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	S651	000392900-T	TACT SWITCH		
	S652	000392900-T	TACT SWITCH		
	S653	000392900-T	TACT SWITCH		
	TH700	TH103J05J	THERMISTOR		
	TH981	TH103J05J	THERMISTOR		
	TU1	000153680	TUNER PACK	TUNNER FAE372-E	
	X51	000171200-T	CRYSTAL	4.332MHZ	
	X521	000171590-T	CRYSTAL	16.9344MHZ	
	X701	000171600-T	CRYSTAL	12.5MHZ	
	X702	000171610	CRYSTAL	QAX0401-001	

■ Electrical parts list (Front board)

Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	CN601	KZ040160L	CONN.TERMINAL	16P FPC CONNECT	
	CN631	KZ040060L	CONN.TERMINAL	6P FPC CONNECTO	
	C606	CY104423J	C.CAPACITOR	0.1 MF	
	C607	CY104423J	C.CAPACITOR	0.1 MF	
	C608	CY104423J	C.CAPACITOR	0.1 MF	
	C609	CZ6816D2J	C.CAPACITOR	680 PF	
	C610	CY475316J	C.CAPACITOR	4.7 MF	
	C611	CY475316J	C.CAPACITOR	4.7 MF	
	C612	CQ393328J	C.CAPACITOR	0.039 MF	
	C613	CY180J90J	C.CAPACITOR	18 PF 3.15K	
	C614	CY104423J	C.CAPACITOR	0.1 MF	
	C615	CY562623J	C.CAPACITOR	0.0056MF	
	C616	CY475316J	C.CAPACITOR	4.7 MF	
	C617	CY475316J	C.CAPACITOR	4.7 MF	
	C623	CY475316J	C.CAPACITOR	4.7 MF	
	C661	CY102623J	C.CAPACITOR	0.001 MF	
	C662	CY102623J	C.CAPACITOR	0.001 MF	
	D623	000372400-T	SI.DIODE	SML310LT	
	D624	000372400-T	SI.DIODE	SML310LT	
	D625	ZDZS5R1BL	ZENER DIODE	UDZS5.1B	
	D627	000372390-T	SI.DIODE	LT1F67AF	
	D628	000372400-T	SI.DIODE	SML310LT	
	D629	000372400-T	SI.DIODE	SML310LT	
	D630	000372400-T	SI.DIODE	SML310LT	
	D632	000372400-T	SI.DIODE	SML310LT	
	D633	000372400-T	SI.DIODE	SML310LT	
	D634	000372400-T	SI.DIODE	SML310LT	
	D635	000372400-T	SI.DIODE	SML310LT	
	D636	000372400-T	SI.DIODE	SML310LT	
	D637	000372400-T	SI.DIODE	SML310LT	
	D638	000372400-T	SI.DIODE	SML310LT	
	D639	000372400-T	SI.DIODE	SML310LT	
	D640	000372340-T	SI.DIODE	CL-190UB-X	
	D641	000372340-T	SI.DIODE	CL-190UB-X	
	D643	000372400-T	SI.DIODE	SML310LT	
	D644	000372400-T	SI.DIODE	SML310LT	
	D645	000372400-T	SI.DIODE	SML310LT	
	D646	000372400-T	SI.DIODE	SML310LT	
	D647	000372400-T	SI.DIODE	SML310LT	
	D648	000372400-T	SI.DIODE	SML310LT	
	D649	000372400-T	SI.DIODE	SML310LT	
	D650	000372400-T	SI.DIODE	SML310LT	
	FL611	000282950	CFL		
	IC601	000974290	IC	LC75878W	
	IC603	000874540	IC	RPM6938-V4	
	L611	LC680J26L	CHOKE COIL	68MH	
	L612	000125810-T	CHOKE COIL	TRANS TR11-B-S	
	L613	LC100J10J	CHOKE COIL	10MH	
	PC601	000874550	IC	PR-20	
	PC602	000874550	IC	PR-20	
	Q611	TRD2150(QRS)L	TRANSISTOR	2SD2150/RS/-W	
	Q612	TRD2150(QRS)L	TRANSISTOR	2SD2150/RS/-W	
	Q613	TRC114YUL-A	DIGI.TRANSISTOR	DTC114YUA	
	Q614	TRC114YUL-A	DIGI.TRANSISTOR	DTC114YUA	
	Q615	TRC114YUL-A	DIGI.TRANSISTOR	DTC114YUA	
	Q616	TRC114YUL-A	DIGI.TRANSISTOR	DTC114YUA	
	Q691	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	Q692	TRC4081(QRS)L	TRANSISTOR	2SC4081/QR/-X	
	R606	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R607	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R608	RK222JA0J	C.RESISTOR	1/10W 2.2 K	
	R609	RK683JA0J	C.RESISTOR	1/10W 68 K	
	R610	RK222JA0J	C.RESISTOR	1/10W 2.2 K	

⚠	Item	Parts number	Parts name	Remarks	Area
	R611	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R612	RK472JA0J	C.RESISTOR	1/10W 4.7 K	
	R613	RK681JA0J	C.RESISTOR	1/10W 680	
	R620	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R621	RK271JA0J	C.RESISTOR	1/10W 270	
	R622	RK331JA0J	C.RESISTOR	1/10W 330	
	R623	RK821JA0J	C.RESISTOR	1/10W 820	
	R624	RK821JA0J	C.RESISTOR	1/10W 820	
	R625	RK471JA0J	C.RESISTOR	1/10W 470	
	R626	RK103JA0J	C.RESISTOR	1/10W 10 K	
	R627	RK121JA0J	C.RESISTOR	1/10W 120	
	R628	RK000JA0J	C.RESISTOR	1/10W 0	
	R629	RK102JA0J	C.RESISTOR	1/10W 1 K	
	R630	RK271JA0J	C.RESISTOR	1/10W 270	
	R631	RK391JA0J	C.RESISTOR	1/10W 390	
	R632	RK391JA0J	C.RESISTOR	1/10W 390	
	R633	RK391JA0J	C.RESISTOR	1/10W 390	
	R634	RK391JA0J	C.RESISTOR	1/10W 390	
	R636	RK391JA0J	C.RESISTOR	1/10W 390	
	R637	RK821JA0J	C.RESISTOR	1/10W 820	
	R638	RK821JA0J	C.RESISTOR	1/10W 820	
	R639	RK122JA0J	C.RESISTOR	1/10W 1.2 K	
	R640	RK182JA0J	C.RESISTOR	1/10W 1.8 K	
	R641	RK272JA0J	C.RESISTOR	1/10W 2.7 K	
	R642	RK392JA0J	C.RESISTOR	1/10W 3.9 K	
	R644	RK391JA0J	C.RESISTOR	1/10W 390	
	R645	RK391JA0J	C.RESISTOR	1/10W 390	
	R646	RK271JA0J	C.RESISTOR	1/10W 270	
	R647	RK271JA0J	C.RESISTOR	1/10W 270	
	R648	RK271JA0J	C.RESISTOR	1/10W 270	
	R649	RK271JA0J	C.RESISTOR	1/10W 270	
	R650	RK821JA0J	C.RESISTOR	1/10W 820	
	R651	RK821JA0J	C.RESISTOR	1/10W 820	
	R652	RK122JA0J	C.RESISTOR	1/10W 1.2 K	
	R653	RK182JA0J	C.RESISTOR	1/10W 1.8 K	
	R654	RK272JA0J	C.RESISTOR	1/10W 2.7 K	
	R658	RK181JA0J	C.RESISTOR	1/10W 180	
	R667	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R668	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R671	RK331JA0J	C.RESISTOR	1/10W 330	
	R672	RK331JA0J	C.RESISTOR	1/10W 330	
	R673	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R675	RK332JA0J	C.RESISTOR	1/10W 3.3 K	
	R676	RK181JA0J	C.RESISTOR	1/10W 180	
	R691	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R692	RK393JA0J	COMP.RESISTOR	1/10W 39 K	
	R693	RK104JA0J	COMP.RESISTOR	1/10W 100 K	
	R694	RK393JA0J	COMP.RESISTOR	1/10W 39 K	
	S623	000392970-T	TACT SW		
	S624	000392970-T	TACT SW		
	S625	000392980-T	TACT SW		
	S631	000392970-T	TACT SW		
	S632	000392970-T	TACT SW		
	S633	000392970-T	TACT SW		
	S634	000392970-T	TACT SW		
	S635	000392970-T	TACT SW		
	S636	000392970-T	TACT SW		
	S637	000392970-T	TACT SW		
	S639	000392970-T	TACT SW		
	S640	000392970-T	TACT SW		
	S641	000392970-T	TACT SW		
	S642	000392970-T	TACT SW		
	S643	000392970-T	TACT SW		
	VR621	000392860	ENCODER		